



# MEMORANDUM OF UNDERSTANDING ON THE CONSERVATION AND MANAGEMENT OF MARINE TURTLES AND THEIR HABITATS OF THE INDIAN OCEAN AND SOUTH-EAST ASIA

CMS/IOSEA/MOS8/Doc.8.2/Rev.2

30 September 20 October 2019

Original: English

8<sup>TH</sup> MEETING OF THE SIGNATORY STATES Da Nang, Viet Nam, 21-25 October 2019 Agenda Item 8.2

#### DRAFT WORK PROGRAMME (WP) 2020-2024 FOR THE IOSEA MARINE TURTLE MOU

(Prepared by the Secretariat with Initial - Revisions by the Advisory Committee)

#### Action Requested:

- · Review this document
- Prioritize, amend and shorten the draft WP to a realistic number of concrete and feasible measures in Section 1
- Review and, if necessary, amend Section 2 of the draft WP

#### DRAFT WORK PROGRAMME (WP) 2020-2024 FOR THE IOSEA MARINE TURTLE MOU

#### Introduction

- Numerous topics have been discussed, actions recommended and implemented during the 18 years since IOSEA Marine Turtle MOU came into force. At every meeting, recommendations have been made to Signatory States, Advisory Committee and Secretariat. These have often been spread across different documents, and have only partly been included in the lists of Action Points introduced by MOS6. With the changes in Secretariat staff in recent years, identifying all proposed activities and following up on them has proved challenging. The same is likely true for new Focal Points.
- 2. In order to capture the outcomes of these important discussions, the IOSEA Secretariat has compiled a synthesis of existing recommendations (Doc. 8.1) and, based on this compilation, developed a draft Work Programme (Part 1 of this document).
- 3. To facilitate effective implementation of agreed activities in the coming intersessional period, it is important to make sure all important outcomes of MOS8 are captured and all necessary follow-up activities are clearly defined. Therefore, the IOSEA Secretariat proposes that MOS8 adopts a Work Programme, which would:
  - a) serve as the most important MOS8 outcome document to guide stakeholders in the implementation of the IOSEA Marine Turtle MOU and its CMP
  - b) reflect the priorities of the Signatory States
  - c) be compiled, agreed and adopted by the MOS in a systematic way
- 4. The Secretariat prepared this document as a first draft of the IOSEA Work Programme from 2020 onwards for the review, amendment and adoption by MOS8.

#### **Structure of the Document**

- 5. The present document is derived from the Synthesis of Existing Recommendations (Doc. 8.1). The document consists of two parts:
  - Section 1: IOSEA Draft Work Programme (WP) 2020-2024 and
  - Section 2: Programmes of the Conservation and Management Plan (CMP), which are not addressed in the current draft WP, because they were not represented in the "Synthesis of Existing Recommendations".
- 6. Part 1, the Draft Work Programme (WP) 2020-2024, contains three sections:
  - Section 1 "Measures that Correspond to CMP Objectives and Programmes" comprises measures derived from existing recommendations for the MOU (Synthesis of Existing Recommendations, Document 8.1), organized according to the structure of the CMP;
  - Section 2 "Measures Related to MOU Administration and Coordination" lists dayto-day tasks of the Secretariat that are needed to maintain and advance MOU coordination and administration:
  - Section 3 "Measures without Corresponding CMP Programmes" lists four existing recommendations, which did not match any of the CMP Programmes and activities.

7. MOS8 should particularly focus on Section 1, as these measures directly address conservation of marine turtles and their habitats. Measures in Section 1 are sorted according to the structure of the IOSEA Conservation and Management Plan. Repetitive or similar recommendations were combined into single measures to reduce the total number of measures. Currently, there are 100 measures in Section 1, derived from existing recommendations.

#### Main subjects and activities covered by the current draft WP

- 8. The current draft WP covers 27 subjects (Subject column of the Draft WP), identified in the Synthesis of Existing Recommendations (Doc. 8.1). However, most of the measures address the following five subjects (Table 1):
  - 1) scientific research needs (genetics and other species-specific research (17 measures),
  - 2) fisheries interactions (15 measures),
  - 3) capacity-building (10 measures), and
  - 4) illegal take and trade (8 measures)
  - 5) outreach and communication (8 measures)

Table 1: Ten most frequently addressed subjects from the current draft IOSEA WP (2020-2024) and the number of measures corresponding to different subjects

Subject	Number of measures addressing the subject
1) Fisheries interactions	15
3) Capacity-building	10
2) Genetic research	9
4) Species-specific research	8
5) Illegal Take and Trade	8
6) Outreach and Communication	8
7) Habitat Protection	7
8) Socio-economics	4
9) Funding	4
10) Alternative livelihoods	3
Others	24
Total	100

9. In terms of the types of action required for the suggested measures, by far the most frequent is conducting targeted studies on marine turtles and their habitats, including assessment of existing knowledge (31 measures) (Table 2). This is followed by measures to enhance institutional and international cooperation (14 measures), and to provide training, assistance and to enhance capacity of Signatory States (10 measures).

Table 2: Number of measures from the Draft IOSEA WP 2020-2024 containing various types of action

Type of action required	Number of measures addressing the subject
Conducting targeted studies and assessments, including compilation of existing information	31
Enhancing cooperation and coordination within and between countries, as well as with various stakeholders	14
Enhancing outreach and communication	13
Providing training, assistance and capacity-building	9
Establishing habitat protection, management and conservation measures	8
Enhancing MOU processes	8
Fundraising	5
Others	12
Total	100

## Prioritization of the WP according to priorities identified by National Reports in 2014 and in 2019

- 10. Signatory States indicated main priorities for action in their National Reports submitted prior to the 7<sup>th</sup> Meeting of Signatory States (MOS7). The highest priority for action was "conducting targeted studies on marine turtles and their habitats". This is well reflected in the current draft WP with 32 measures out of 100 addressing this issue. "Establishing habitat protection and conservation measures" was the second most frequently mentioned by Signatory States as a high priority topic. However, this topic ranked only fourth in terms of frequency of corresponding measures in the current draft WP (8 measures). This is because existing recommendations (Doc 8.1), from which the measures were derived, address this issue only to a limited extent. MOS8 may thus wish to ensure that establishing "habitat protection and conservation measures" is addressed sufficiently to reflect this priority. For this purpose, MOS8 may find it useful to consult Part II of this document with the prioritized list of the CMP Programmes which are not addressed in the current Draft WP.
- 11. The analysis of national reports submitted for MOS8 showed slightly changed priorities of the Signatory States. Similar to the previous reporting period, these included "conducting studies on marine turtles and their habitats", "habitat protection" and "education and information programmes". However, in the 2019 reports, measures to reduce bycatch and to protect and rehabilitate marine turtle habitats ranked higher than in the previous reporting period.
- 12. In their 2019 National Reports, Signatories mentioned 20 out of 24 Programmes of the CMP, or activities corresponding to these Programmes. The twelve CMP Programmes most frequently mentioned¹ have been indicated as high priority in the last column of the <u>original</u> Draft WP. <u>However</u>, based on the advice from the Advisory Committee, <u>t</u>The Secretariat suggests that measures falling under these twelve CMP Programmes are discussed firsthas removed this prioritization in the current 2<sup>nd</sup> rRevision. This is to allow each sub-regional group to assign their own priority (high, medium or low) to

<sup>&</sup>lt;sup>1</sup> Mentioned by at least four countries in their National Reports submitted by the reporting deadline in 2019 as a high priority

<u>each measure</u>, and hence get a more comprehensive picture of the situation in each sub-region.

#### Selection of a realistic number of actionable measures for the WP

- 13. The MOS8 is requested to review the draft WP with a particular focus on Section 1. The total number of measures falling under the high priority Programmes, as indicated by National Reports in 2019contained in , is 67 (Section 1 of this Draft WP is 106only). This number remains too high to be realistically addressed within a five-year period. The Meeting of Signatories might therefore wish to prioritize measures further and reduce the number of measures to a number that can be realistically implemented in five years. For example, MOS8 might consider reducing the number of measures in Section 1 to a maximum of 40, similar to the number of Action Points agreed at MOS7.
- 14. In addition, some of the measures in the current draft are too broad and require further specification, indicating what the steps to be taken should be; others may be out of date. MOS–8 is therefore invited to review, select, amend and update any of the measures they feel necessary, guided by the recommendations of the Advisory Committee. Measures that MOS8 does not discuss and amend to become actionable activities will be deleted from the draft WP before it is tabled for adoption.

#### Part I: Draft Work Programme (WP) 2020-2024

Table 3: Proposed measures based on the Synthesis of Existing Recommendations (Doc.8.1)

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
	Section 1: Measures that Correspond to CMP Objectives and Programmes			
1	Objective 1: Reduce direct and indirect causes of marine turtle mortality			
1.1	Identify and document threats to turtles and their habitats <sup>4</sup>			
1.1 a	Collate and organize existing data			High
	<ol> <li>Determine population-specific threats to be used as a base for monitoring and management:         <ul> <li>a) collect samples to perform genetic analysis on by-caught, stranded and confiscated specimen and record results systematically;</li> <li>b) using genetic markers identified for nesting populations, determine population structure of marine turtle bycatch, stranded and confiscated turtles</li> </ul> </li> </ol>	Fisheries Interactions, Illegal Take and	Signatory States	High
<u>-Xx</u>	COMPLETED-2. Compile existing data on the distribution of Indian Ocean fishing effort and turtle distribution:  Compile and assess information on bycatch in long lines and purse seines, including FAD impact using daxxbtadata from IOTC and SWIOFC  Utilize existing assessments and reports and identify hot spots for bycatch and knowledge gaps  Provide a summary of best available scientific knowledge and recommendations resulting from this analysis  Subject to available resources, perform additional assessments to address identified knowledge gaps	Fisheries Interaction	Specialized project consultancy / IOSEA Secretariat; Nairobi Convention	High COMP LETED
	3. Assess vulnerability of Loggerhead nesting beaches to climate change in the IOSEA region, using beach height data, temperature profiles, and distribution maps (see		Signatory States	High

<sup>&</sup>lt;sup>2</sup> Number of the Programme (indicated by a number) or a specific activity (indicated by a number and a letter) from the CMP <sup>3</sup> CMP Programmes to be addressed as highest priority, as indicated by the National Reports 2019

<sup>4</sup> Similar to 3.3: Analyze data to mitigate threats and improve conservation practices

CMP <sub>2</sub>	Measures to be taken	Subject	<b>Lead</b> Actors	Priority <sup>3</sup>
	Provisional List of Project Concepts Resulting from the Loggerhead Assessment (2013))			
	COMPLETED4. Identify priority areas to address habitat destruction:  a) Conduct an online survey (e.g. survey monkey) to identify key drivers of impacts to beach/dune systems (e.g. Casuarinas, erosion, soft and hard armouring, light pollution) on nesting beaches across the IOSEA region. b) Use data from the IOSEA website, Google Earth and other spatial tools to map and quantify the extent of the impacts. c) Overlay these impacts with known nesting habitats	Habitat Protection	A post graduate research project with expert advice/supp ort, AC	High <u>C</u> OMPL ETED
	<u>COMPLETED</u> 5. Assess the extent of use and impacts of exotic vegetation to stabilize beach/dune systems and provide recommendations/ guidelines on sensible removal of exotic vegetation from these ecosystems (cf. Leatherback Assessment project concept). Fund a scientifically-robust post graduate study in Mozambique.	Habitat Protection		High COMP LETED
	<ul> <li>6. Assess vulnerability of (Loggerhead) turtles to marine debris, including ghost nets and plastic pollution</li> <li>a) Investigate transport and abundance of marine debris in the Indian Ocean, marine debris ingestion rates, and vulnerability<sup>5</sup></li> <li>b) Investigate impact on each genetic stock/population/management unit</li> </ul>	Marine Debris, Genetics	Signatory States	High
	6 (1). Send out the draft Hawksbill Assessment to other experts in the region for their comments and provide a final report to the Secretariat by 30 June 2020 for publishing.	Species: Hawksbill	Advisory Committee	
	6 (2). Initiate the next species assessment for Olive Ridley Turtles with a view to tabling a draft at IOSEA MOS9.	Species: Olive Ridley	Advisory Committee	
	6 (3). Prepare a brief document on the conservation status of Flatback Turtles with a view to tabling a draft at IOSEA MOS9.	Species: Flatback	Advisory Committee	
	6 (4). Cooperate with the CMS Scientific Council in their review of relevant scientific information on conservation and threats to marine turtles, such as climate change and sky glow, and the development of corresponding recommendations.	Climate Change, Light Pollution	Advisory Committee	
	6 (5). Encourage the review and investigation of longer-term impacts of underwater noise on turtles.	<u>Underwater</u> <u>Noise</u>	Signatory States	

<sup>&</sup>lt;sup>5</sup> Similar to CMP 2.1

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
Mov ed from 1.4	18. Compile information on the status of on-board observer programmes and the status of marine turtle bycatch recording within those observer programmes.	Fisheries Interactions	Signatory States	<u>High</u>
1.1 b	Establish baseline data collection and monitoring programmes			
	7. Establish a research programme to investigateilnvestigate potential overlaps of fishing activities and turtles/dugong's distribution.distributions.	Fisheries Interactions	Signatory States	High
	REDUNDANT:8. Conduct an expert workshop and provide training to set up a monitoring program of 3-5 years in Sri Lankan Leatherback rookeries (see Provisional List of Project Concepts Resulting from the Updated (2012) Leatherback Assessment)	Species: Leatherback		High
	REDUNDANT:9. Organize an expert workshop, including initial training to set up a 3-5-year monitoring program of nesting Loggerhead Turtles on Socotra, Oman and in Sri Lanka (see Provisional List of Project Concepts Resulting from the Loggerhead Assessment (2013))	Species: Loggerhead		High
	9. Establish and/or continue a reliable nesting beach monitoring programme	Nesting Sites	Signatory States, Advisory Committee	<u>High</u>
	COMPLETED 10. Engage with local environmental agencies and NGOs through an expert- directed workshop to document and address threats to Leatherbacks, nesting along the Indian Ocean margin of southern Indonesia (see Provisional List of Project Concepts Resulting from the Updated (2012) Leatherback Assessment)	Species: Leatherback		High COMP LETED
	11. Where necessary, conducteConduct surveys of with fishermen to estimate bycatch and identify solutions to mitigate bycatch, ensuring appropriate communication with fishermen to build good working relationships and avoid bias and suspicion, e.g. making use of the questionnaire developed by the CMS Dugong MOU	Fisheries Interactions	Signatory States <del>,</del> NGOs, Academia	High
	11 (1). Collaborate with the Olive Ridley Project by regularly submitting available data on ghost nets and ghost net turtle entanglement to the online data portal.	Marine Debris, 7 Cooperation	Signatory States, Advisory Committee	

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
	11 (2) Monitor light pollution and its impact on the nesting turtles and their hatchlings	Light Pollution, Nesting Sites	Signatory States	
1.2 a, b	Determine, adapt and adopt best conservation and management practices			
	12. Develop guidance on the management of beaches for successful hatchling production, including management of hatcheries if and when required.  a)Assess hatchery management practices and determine advise on best_conservation practice, compile a training publication with for best practices and organize a workshop to disseminate this information (see Provisional List of Project Concepts Resulting from the Updated (2012) Leatherback Assessment). Include Sri Lanka and Maldives. Include Hawksbill hatcheries particularly in Indonesia and Philippines	HatcheryHatcher iesy Management	Advisory Committee, Secretariat	High <sup>6</sup>
	12 (1). Organize workshops to disseminate the best practice information enfor the management of hatcheries hatchery management	<u>Hatcheries</u>	Signatory States	<u>High</u>
	12 (2). Consult with the Advisory Committee on the draft tourism guidelines and recommended code of conduct for operators on recreational in-water interactions with CMS-listed species when these are developed through the CMS Scientific Council.	Tourism, 7 Cooperation	Secretariat	
	12 (3). Utilize the Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds (presented in MOS8/Doc.11.1) nationally, and engage with CMS in any further work to be done on the subject.	Light Pollution, Cooperation	Signatory States, Advisory Committee, Secretariat	
	12 (4). Utilize the CMS Family <i>Guidelines on Environmental Impact Assessments for Marine Noise-generating Activities</i> and disseminate them to all national departments involved in deciding on noise-generating activities	<u>Underwater</u> <u>Noise</u>	Signatory States	
	12 (5). Develop guidance on the management of beaches for successful hatchling production, including management of hatcheries if and when required.		Advisory Committee	

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<sup>&</sup>lt;sup>6</sup>Hatchery management was not prioritized by most Signatories in their National Reports submitted in 2019. However, the Secretariat suggests MOS8 to consider taking up this measure in the WP as a high priority, because this topic was highlighted by MOS7 and reflected in the dedicated Action Point which instructed the Secretariat to prepare Document 11.3 on Hatchery Management, which was accomplished through an external expert.

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
1.3	Implement programmes to reduce adverse economic incentives			High
1.3 a	Conduct socio-economic studies among communities that interact with marine turtles	and their habitats		High
	(WIO-MTTF specific) 13. Implement the WIO-MTTF Action Plan for three socio-economic workshops	Socio- economics	WIO Signatories	High (WIO- MTTE specific
	13 (1). Compile information on available tools and mechanisms which incorporate all stakeholders to evaluate and address socio-economic issues	Socio- economics	Specialised project consultancy	
	13 (2). Investigate human dimensions that underpin the use and trade of marine turtles and turtle products.	Socio- economics		
	(WIO-MTTF specific) 14. Conduct a regional workshop to assess the social-economic values of marine turtles and compatibility of conservation approaches, including both exploitation (consumptive use) and sustainable ecotourism (live turtles, non-consumptive use).	Socio- economics	WIO Signatories	High
	REDUNDANT (DUPLICATES 28) 15. Explore the potential use of certification schemes to provide market-based incentives for regional turtle conservation (e.g. Marine Stewardship Council or other eco-labelling schemes for fish products caught without affecting marine turtles)	Socio- economics	Specialised project consultancy	High
1.3 c	Identify resources and sources of funding for these programmes			High
	REDUNDANT (DUPLICATES 28)16. Request the support of WIOMSA and other regional funding bodies to conduct a regional workshop to assess the social-economic values of marine turtles and compatibility of conservation approaches, including both exploitation (consumptive use) and sustainable ecotourism (live turtles, non-consumptive use).			HighD UPLIC ATES 14
	16 (1). Compile and disseminate information on available funding opportunities	Funding	Secretariat, Advisory Committee	
1.4	Reduce incidental capture and mortality from fisheries interactions		•	High
1.4 a	Develop and use gear, devices and techniques to reduce bycatch			High

CMP <sub>2</sub>	Measures to be taken	Subject	<b>Lead</b> Actors	Priority <sup>3</sup>
	17. Establish and continue national and/or regional bycatch mitigation projects for industrial and artisanal fisheries (including gear modification, TEDs, and improved fishing practices to reduce bycatch).	Fisheries Interactions	Signatory States, Nations with fleets in the region	High
1.4 b	Procedures and training to reduce bycatch			High
Mov ed to 1.1 a	MOVED TO 1.1 A 18. Compile information on the status of on-board observer programmes and the status of marine turtle bycatch recording within those observer programmes in the Western Indian Ocean region.	Fisheries Interactions	WIO MTTF Members	High
	19. Establish national observer, assessment and quantification programmes, inter alia, to assessing the impact on different turtle life stages and populations (genetic stocks) <sup>7</sup>	Fisheries Interactions	Signatory States, Nations and Nations deploying foreign fishingwith fleets into the region, RFMOs- International fisheries managemen t agencies	High
1.4 d	Liaise and coordinate with fisheries industries and FMO			
	20. Ensure that IOSEA concerns related to sources of turtle mortality are presented at IOTC Meetings/ especially WPEB (e.g. including FAD s and gill nets, based on new information that comes to light <sub>-</sub> ):  a) Initiate dialogue on current issues of concern among IOSEA Signatories and IOTC	Fisheries Interactions, Cooperation	Secretariat, AC, Signatory States, who	High

<sup>&</sup>lt;sup>7</sup> Similar to CMP 1.4 b)

CMP <sub>2</sub>	Measures to be taken	Subject	<u>Lead</u> Actors	Priority <sup>3</sup>
	members in advance of each IOTC meeting (including subsidiary bodies) b) Continue to contribute to the IOTC Executive Summary on marine turtles c) IOSEA AC Members and National Focal Points to communicate important issues to members of national delegations attending IOTC in advance of each IOTC meeting d) Signatories (especially if FP are the same) to promote the cause of turtles in IOTC meetings, and to communicate issues with Secretariat and others for information.		are members of the IOTC, NIO MTTF Members	
1.5	Prohibition/regulation of direct harvest and domestic trade			
	20 (1). Request inclusion of an AC member in the CMS Aquatic Wild Meat Working Group and provide opportunity to the Advisory Committee to comment on draft documents.	Hlegal-Take and Trade	Secretariat, Advisory Committee	
1.5 a	Enact legislation to prohibit direct harvest and domestic trade			
	21. Harmonize national legislation within countries (e.g. Malaysia and Japan) and in accordance with the CMP Objective 1.5 to prohibit direct take and trade, except traditional harvest for CMC listed species	Illegal Take and Trade	Signatory States, possibly assisted by NGOs	
	<ul> <li>22. Improve enforcement of national legislation on exploitation of turtles particularly in (but not limited to) Indonesia, Kenya, Madagascar, Malaysia, Philippines, United Republic of Tanzania, Viet Nam and China (non-Signatory):</li> <li>a) identify and articulate actual resource needs and raise funds to increase human and material resources,</li> <li>b) build field-level capacity at national and regional levels, and</li> <li>c) identify weaknesses in the judicial process and address these</li> </ul>	Illegal Take and Trade	Signatory States, CITES	<u>High</u>
1.5 d	Determine the cultural and traditional values and economic uses of marine turtles (both consumptive)	n consumptive and	d non-	
	23. Consider applying innovative techniques (such ase.g. the Community Voice Method (CVM)) to ensure that concerns of subsistence resource users are incorporated in decision-making		Signatory States <del>,</del> NGOs	
1.5 e	Negotiate, where appropriate, management agreements on the sustainable level of trad	itional harvest		
	24. In consultation with local communities, develop culturally acceptable management	Socio-	Signatory	

CMP <sub>2</sub>	Measures to be taken	Subject	<b>Lead</b> Actors	Priority <sup>3</sup>
	agreements on the sustainable level of legal traditional harvestConsider legalizing take and introducing quotas where take is legal	economics	States	
2	Objective 2. Protect, conserve and rehabilitate marine turtle habitats			
2.1 a	a) Designate and manage protected /conservation areas in areas of critical habitat or ta ( <u>High</u> )	ke other measur	es to remove th	reats
	25. Continue to identify critical habitats; protect and adequately manage already identified critical habitats.  26., creating Create marine protected area networks to provide management and connectivity across different habitats, for example by completing development and implementation of an effective network / list of sites of importance for marine turtles	Habitat Protection	Signatory States: Advisory Committee: Secretariat	High
	25 (1). Create marine protected area networks to provide management and connectivity across different habitats9, for example by completing development and implementation of an effective network / list of sites of importance for marine turtles	Habitat Protection	Signatory States, Advisory Committee, Secretariat	
2.1 b	Site Network			
	REDUNDANT26. Complete development and implementation of an effective network / list of sites of importance for marine turtles	Habitat Protection	Signatory States, Advisory Committee, Secretariat	Subsidary to 25. (one action to achie ve 25).
	27. Revise the site network application template (and/or instructions) to be more specific so	Habitat	Advisory	

<sup>&</sup>lt;sup>8</sup> Similar to CMP 2.1 a) and b) <sup>9</sup> Similar to CMP 2.1 a) and b)

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
	that all relevant data are captured in the initial application to reduce the need for lengthy re-visions	Protection	Committee, Secretariat	under way: could delete from final docu ment.
	27. Establish a working group to develop revised Site Information Template, refined evaluation criteria and scoring instructions, and a simplified post-scoring process.  The working group to provide these documents to the Secretariat for circulation to the Signatories for their comments within two months.  The Secretariat to circulate to Signatories the final proposals for intersessional adoption by correspondence in order to enable their use in the run-up to MOS9.	Site Network	Signatory States, Advisory Committee, Secretariat	
	27 (1). Merge the steering committee and Site Network Discussion Group established by MOS7 to provide advice to Site managers.	Site Network	<u>Signatory</u> States	
	27 (2). Consider nominating IOSEA Network Sites as Ramsar Sites (if not nominated yet) to achieve additional support and recognition.	Site Network, Cooperation	Signatory States	
2.1 c	Develop incentives for adequate protection of areas of critical habitat outside protected	areas		High
	28. Explore possibility of introducing certification schemes through multinational companies and organizations involved in coastal tourism and development to reduce impact on turtle habitat		Specialized project consultancy, Signatory States	High High Low (there are additi onal ways te achie ve 2.1c)

CMP <sub>2</sub>	Measures to be taken	Subject	<b>Lead</b> Actors	Priority <sup>3</sup>
2.1 d	Undertake assessments of the environmental impact of human activities on turtles and	their <u>habitats</u> hab	itat	High (SS)
	29. Provide support, and recommendations and guidelines to Signatory States and stakeholders on the importance of integrating sea turtle conservation into EIA processes; consider incorporating progress up-dates on EIA implementation in national re-porting; and possibly analyze analyse how EIA processes are implemented in each country.		Secretariat, AC	High
	29 (1). Utilize the EIA guidelines aboutregarding impacts on sea turtles and their habitats (Document 7.5).	Environmental Impact Assessment	Signatory States	
	30. Incorporate turtle conservation needs into <a href="EIA-/">EIA-/</a> risk assessment of new developments and into Integrated Coastal Zone Management processes. The key emerging issues may include: energy sector (e.g. oil refineries, nuclear <a href="power_energy">power_energy</a> plants), desalination infrastructure development and effluent, harbour development and dredged channels, industrial and domestic wastewater, light pollution (residential and tourism development & industrial activities). <a href="mailto:10">10</a>	Impact	Signatory States	High
2.1 f	Monitor and protect water quality from pollution including marine debris			High
	31. Continue to address the problem of ghost nets, plastic debris, oil pollution, etc via direct dialogue with fishermen-relevant industries and stakeholders and surveys	Environmental Impact Assessment	Not specified Signatory States	High
2.2	Rehabilitate degraded marine turtle habitats			
	31 (1). In any beach management measures, consider the potential impact of planting Casuarina trees along their coastline- (see Document 7.4).	Habitat Protection	Signatory States	
	31 (2). Maintain and/or restore habitats important for turtles, such as mangrove, seagrass, and intertidal habitats.	Habitat Protection	Signatory States	
3	Objective 3. Improve understanding of marine turtle ecology and populations through exchange	research, monitor	ing and inform	ation

<sup>&</sup>lt;sup>10</sup> Same as CMP 2.1

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
3 a	3.a Conduct baseline studies on marine turtle populations and their habitats			
	<ul> <li>32. Improve understanding of the biological structure of Leatherback Marine Turtle populations through scientific and traditional knowledge:</li> <li>a) Quantify key demographic parameters {(e.g. reproductive output, clutches per season, remigration interval, growth rates, and annual survivorship)}</li> <li>b) Complete mapping of the breeding distributions distribution and census assess population size and status particularly in Sri Lanka, southern Indonesia to northwestern Australia and Philippines.</li> <li>c) Conduct satellite telemetry studies to determine foraging distribution distributions, migration path-ways, habitat use etc,—using appropriate technology,—(e.g. flipper tagging, satellite telemetry and genetic sampling).</li> <li>d) Collect data on hatchling production including sex ratios and health and survivorship of hatch-lings (particularly in South Africa, Mozambique, India, Sri Lanka, Indonesia and Papua New Guinea and Thailand)</li> </ul>	Research Species: Leatherback All	Signatory States Signatory States	High (very)
	33. Provide partial support or help to leverage funding for a post-graduate <u>studiesystudy</u> to investigate the <u>conservation biology of Marine Turtleshatching success and incubation temperature of Leatherback rookeries in Mozambique.</u> This research should be done in conjunction with sub-regional experts (Dr Ronel Nel/South Africa).	Leatherback	Advisory Committee, Secretariat,  AcademiaRes earch Institutions	Low
	34. Improve understanding of the biological structure of Loggerhead Turtle populations: growth rates, survivorship, recruitment, and habitat use of foraging turtles  Improve understanding of the dispersal mechanisms and routes for marine turtle Loggerhead hatchlings and post-hatchlings, and migration routes for adults of each of the Indian Ocean management units.  REDUNDANT35. Conduct studies to improve knowledge of hatchling production rates and hatchling and post-hatchling dispersal of Loggerhead Turtles from rookeries in the Indian Ocean (see Provisional List of Project Concepts Resulting from the Loggerhead	Research	Signatory States AcademiaRes earch Institutions	High
	Assessment (2013))  36. Complete the assessment of the Hawksbill Turtle in the IOSEA region,36. Determine the	Species:	Advisory	High

CMP <sub>2</sub>	Measures to be taken	Subject	<u>Lead</u> Actors	Priority <sup>3</sup>
	current conservation status of Loggerhead Turtles in the NW Indian Ocean by analysing existing dataREDUNDANT	Loggerhead	Committee	
3.1 c	Characterize genetic identity of marine turtle populations (genetic stocks)			High
	37. Rather than relying on the Regional Management Unit (RMU) maps given in Wallace et al. (2011), countries should dDevelopdevelop maps for each genetic stock indicating rookery locations and habitat use in pelagic and benthic environments, rather than relying on the Regional Management Unit (RMU) maps given in Wallace et al. (2011),	Genetics	Signatory States	High
	38. Conduct genetic analysies analyse is to identify genetic stocks (management units) for Marine Turtles in the IOSEA region: 38. Expand genetic analysis to advance determination of marine turtle management units (genetic stocks):  a) Compile and assess available information to identify needs and opportunities for regional analyses to inform genetic stock assessment, starting with nesting beach related genetics sampling  b) Incorporate genetic sampling into ongoing monitoring activities (subject to budget and resources available)  c) With the help of the AC, establish uniform standardized sampling and storage protocols and translate them into local languages  d)c) Address capacity building needs to enable in-country analysis analyses, upon request  e)d) AC and Secretariat to facilitate contacts with laboratories slabs abroad and CITES permits to conduct genetic analysis analyses, upon request		a) plan a specialized consultancy and seek funds for implementatio n; b) Signatory States, c)-e), Secretariat, and Advisory Committee AC	High
	39. Expand on the existing knowledge about genetic stocks <sup>11</sup> work of(e.g., Fitzsimmons and Limpus (2014), Maintain a record of Bourjea et al. 2015) to identify genetic studies conducted in the region and submit the information to the IOSEA Secretariat for posting on the IOSEA website and presentation at MOS9(see for example Bourjea et al. 2015)	Genetics	MTTF chairs, possibly AC memb.workin g on the topic Advisory Committee	High Mediu m
	REDUNDANT 40. When planning genetic analysis, seek to complement efforts ongoing	Genetics		High

<sup>11</sup> Citations will be provided on the IOSEA website. [LINK TO BE INCLUDED]

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
	elsewhere; include Leatherback, Green, Loggerhead, Hawksbill Turtles, as appropriate.			
	REDUNDANT41. Link genetics work more closely with the Species Assessments and the Site Network process, which could help to identify index beaches and priority foraging areas	Genetics		High
	REDUNDANT42. Improve understanding of the genetic structure of Leatherback turtles nesting down through the Andaman Sea, southern Indonesia to northern Australia and in Sri Lanka:	Genetics		High
	REDUNDANT43. Determine the genotype of Leatherback turtles nesting in Sri Lanka, India, Thailand and Indonesia (Sumatra) and compare these with published haplotypes	Genetics		High
	REDUNDANT44. Conduct genetic analysis to identify management units for Loggerhead Turtles in the IOSEA region starting with Sri-Lanka	Genetics	Sri Lanka (Dept. of Wild-life and/or NGOs; and co- operating countries for sample analysis)	High
3.2, 3.4	Exchange Information, standardize data collection and conduct collaborative research			
	5. Apply Develop/identify a accepted guidelines and protocols for data collection and management.   standardized monitoring protocols (LISTe.g., Eckert et al. 1999, Shenoy et al. 2011) protocol to guide and collect data on:  a) hatchery and head-starting practices  b) in-water studies (photo identification, etc.)  c) strandings and mortality (data collection, database)  d) tissue sampling	Method Standardization	Signatory States, Advisory Committee	Mediu m

12 Citations to useful and accepted guidelines and protocols for data collection and management will be provided on the IOSEA website (LINK TO BE INCLUDED).

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
	e) determining sex ratios			
	46. Review Standardize protocols for data collectedion to collection:  Aassess gaps and needs for the sub-regions in terms of research and monitoring methodology	Method Standardization	Signatory States	Mediu m
			AC. Secretariat Advisory Committee,	Mediu m
	46 (1). Facilitate capacity building in applying best practice/standard methods	Method Standardization	Advisory Committee, Secretariat	
	47. Share information on genetics: -submit haplotype information to genetic banks (with guidance from AC) Endeavour to share sequenced data, particularly for hawksbill genetics REDUNDANT	Information Sharing	SEA Signatory States,; AC, AcademiaRes earch Institutions.	Mediu m
	<u>REDUNDANT</u> 48. Australia/Indonesia/PNG/USA <u>Countries within sub-regional groups</u> work together to develop proposal to address the threats to hawksbills on key foraging grounds in range states	Collaborative Research	Signatory States, AC	Mediu m
3.3	Analyze data to mitigate threats and improve conservation practices			
	See 1.1 a) recommendations 1-6 above			
4	Objective 4. Increase public awareness and public participation			
4.1	Establish education, awareness and information programmes			High
	REDUNTANT 49. Develop an IOSEA-level communication plan, and work with Focal Points to develop targeted IOSEA communication plans at the national level	Outreach and Communication	Secretariat and Focal Points (supported by specialised	High RED UNTA NT

CMP <sub>2</sub>	Measures to be taken	Subject	<b>Lead</b> Actors	Priority <sup>3</sup>
			<del>project</del> <del>consultancy)</del>	
	50. Establish linkages with other relevant initiatives, such as seaturtle.org's web directory of information and people; International and regional Sea Turtle Symposium Symposia; and global and regional Newsletters. 1.; Regional Seas Programmes and RFMOs. 1. Specific examples of potential opportunities:  North-west Indian Ocean: Seek areas of collaboration and cooperation with PERSGA and ROPME  Northern Indian Ocean: identify potential mechanisms for sub-regional cooperation in South Asia (e.g. SAARC)  South-east Asia: consider development of a MoU with SEAFDEC; engage Coral Triangle Initiative  General: Explore possible synergies with RFMOs. CMS Dugong MOU, other turtle agreements, and SPREP (in the Pacific)	Outreach and Communication Cooperation	Secretariat	High
	51. Promote Organize a high-level/high profile eventevents such as World Sea Turtle Day for the purpose, inter alia, of raising Ministerial public and political awareness of turtle conservation and IOSEA's role. Such an event might be linked, for example, to the establishment of a national committee			High
	COMPLETED 52. Use the existing paper MT-IOSEA/SS.7/Doc. 10 to increase the visibility of illegal take/trade issues (e.g. on the IOSEA website) and update it in due course 13	Outreach and Communication; Illegal Take and Trade	Secretariat	High COM PLET ED
	53. Develop media materials to raise the profile of international trade in turtles marine turtle conservation issues, with in-built flexibility to facilitate adaptation to national media by Signatory Sates.	Outreach and Communication; Illegal Take and Trade	SecretariatSig natory States, specialized project	High
	54. To address domestic trade:	Outreach and	Signatory	High

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<sup>&</sup>lt;sup>13</sup>-Not only the existing paper mentioned above, but also CITES COP18 Inf.18 document "Status, Scope and Trends of The Legal and Illegal International Trade in Marine Turtles, Its Conservation Impacts, Management Options and Mitigation Priorities"

CMP <sub>2</sub>	Measures to be taken	Subject	<u>Lead</u> Actors	Priority <sup>3</sup>
	<ul> <li>a) Work with local communities to reduce poaching</li> <li>b) engage religious leaders in awareness campaigns</li> <li>c) educate youth</li> <li>d) enhance transboundary cooperation in education and awareness campaigns</li> </ul>	Communication, ; Illegal Take and Trade	States	
	55. To raiserRaise awareness of turtle consumers, highlight existing regulations, conservation and possibly health issues involved (e.g. address tourists, vendors, well to do egg consumers)		Signatory States, NGOs, national stakeholders	High
	56. Develop <u>and document lessons learnt from</u> successful campaigns <u>and document lessons learned</u> :  a) use examples and lessons <u>learnedlearnted</u> from previous campaigns to develop successful approaches, b) evaluate and document lessons <u>learnedlearnted</u> of <u>from</u> your campaigns c) share lessons <u>learnedlearnted</u> publicly, for example, through IOSEA Secretariat	Outreach and Communication	Signatory States, NGOs, national stakeholders	High
4.2	Develop alternative livelihood opportunities	1		
	<u>REDUNDANT</u> 57. Draft a summary of alternative livelihoods projects in each country and submit to WIO MTTF vice chair	Alternative Livelihoods		RED UND ANT
	58. Develop alternative livelihoods, such as ecotourism and/or livestock keeping, using examples of good practice to ensure genuinely sustainable approaches, which will be beneficial in the long run for both humans and turtle populations <sup>14</sup>		Signatory States, NGOs	
	59. Secretariat suggestion: Aassess available knowledge on best practice approaches compiled from national reports and consultations to and produce a best practice guide for alternative livelihood projects that ensure that all stakeholders are fully involved.(IUCN/IOSEA)		Specialised project consultancy	
4.3	Promote public participation			High
	60. Educate Train organizers and (potential) participants of citizen science activities about	Stakeholder	<u>Advisory</u>	High

<sup>14</sup> Similar to CMP 4.2

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
	species identification and data collection techniques	Engagement	Committee, in-country experts	
	REDUNDANT 61. Distribute IOSEA information materials to a wider audience: Investigate opportunities for incorporating IOSEA information material into existing hard copy publications of other organizations to maximize the reach of IOSEA communications, particularly to stakeholders without access to the internet Focal Points to identify appropriate target audiences within countries (e.g. scientists, fishermen, decision-makers within government; news media / environmental reporters who might arrange for translation into local languages) Guided by Focal Points, direct IOSEA information to national NGOs and indigenous communities to take advantage of their extensive networks for information dissemination	Outreach and Communication		High RED UND ANT
	<ul> <li>62. Showcase exemplary work through the IOSEA Newsletter and website:         <ul> <li>a) Periodically recognize and acknowledge noteworthy contributions to IOSEA implementation (by Signatory States, organizations, corporate sector, individuals etc.)</li> <li>b) Enhance appreciation / recognition of NGO/IGO partners (e.g. through acknowledgement in National Reports and by giving recognition to best practices at national level)</li> </ul> </li> </ul>	Stakeholder Engagement	a) IOSEA Secretariat, with input from the b) Signatory States	High
5	Objective 5. Enhance national, regional and international cooperation			
5.1	Collaborate with and assist signatory and non-Signatory States to regulate and share in illegal trade, and to cooperate in enforcement activities relating to marine turtle produc		de, to combat	High
	63. Strengthen internal, bilateral and international cooperation in enforcement, collaborating with IGOs and NGOs, such as CITES, ASEAN WEN, SAWEN, TRAFFIC to ensure the issue of marine turtle trade is on the agenda of future meetings	Illegal Take and Trade, Cooperation	Signatory States, IGOs, NGOs, Secretariat	High
	REDUNDANT64. Enhance collaboration with IGOs and NGOs, such as CITES, ASEAN WEN, SAWEN, TRAFFIC to ensure issue of marine turtle trade is on the agenda of future meetings	Illegal Take and Trade	Secretariat, Signatory States, NGOs	High
	65. Undertake research to develop targeted strategies to address issues of supply and	Illegal Take and	Signatory	High

CMP <sub>2</sub>	Measures to be taken	Subject	<u>Lead</u> Actors	Priority <sup>3</sup>
	incorporate traditional knowledge and practices and focus particularly on hotspots of international trade, where important sources of turtles or trade routes have been identified, such as Indonesia, Madagascar, and China (Hainan province)  Identify supply and demand areas and trade routes for the international trade in Marine Turtles and their products, and develop targeted strategies to address these issues.	Trade	States, NGOs	
	65 (1). Renew the membership of the Illegal Trade Working Group (ITWG), for example to include CITES, nominate a chair and update the tasks. The ITWG will []	Illegal Take and Trade, Cooperation	Signatory States	
	65 (2). The ITWG will eEnhance exchange of information with CITES, to ensure synergies and to avoid duplication of effort.	Illegal Take and Trade, Cooperation	Secretariat, ITWG	
	65 (3). The ITWG will tTTake further steps to understand and reduce use and domestic trade and to develop awareness campaigns to target online illegal trade. in South-east Asia.	Hlegal Take and Trade	Signatory States, ITWG	
5.2	Assist Signatories and Non-Signatories in developing and implementing action plans for management of marine turtles and their habitats	or the conservatio	n and	
	<ul> <li>66. Encourage and support development and implementation of national action plans, where needed, in collaboration with local communities and other stakeholders: <ul> <li>a) Compile/provide examples of National Action Plans for review and possible adaption by Signatory States to other contexts</li> <li>b) Prioritize countries that need National Action Plans and offer additional assistance to Signatory States in their development (e.g. using expertise within the Advisory Committee, Focal Points, external expertise).</li> </ul> </li> </ul>	Building	Advisory Committee, external experts-	
	c) Assist in the implementation and review of such plans, if requested. 66 (1). Cooperate with CMS in the development of a draft Single Species Action Plan (SSAP) for the conservation of the Hawksbill Turtle to address the trade, use and other threats to the conservation of hawksbill turtles in South-east Asia, and the adjacent western Pacific.	_	Signatory States, Advisory Committee,	

CMP <sub>2</sub>	Measures to be taken	Subject	<u>LeadActors</u>	Priority <sup>3</sup>
		Hawksbill	Secretariat	
5.3	Enhance cooperation and information exchange			High
5.3 a	Identify and strengthen existing mechanisms for cooperation at the sub-regional level			
	67. Encourage more sub-regional interactions (e.g., by organizing intersessional sub-regional meetings, training, task forces, etc.)	Sub-regional Coordination	Signatory States, MTTF Chairs, Advisory Committee, Sub-regional Focal Points	High
	68. Establish coordinated regional approaches to illegal fishing and bycatch management through the engagement of RFMOs and other bodies. —Encourage those not yet participating to participate in the Marine Turtle Task Forces (MTTF), including IOTC, ASCLME, IOC, SWIOFP, etc.		States of the IOSEA RegionRange States, International fisheries management agencies, MTTFs	High
	69. Encourage cooperative research and management of marine turtle management units that are shared across international boundaries.	Sub-regional Coordination	Signatory States, Advisory Committee, Sube-regional Focal Points	
	REDUNDANT 69. Engage RFMOs and other bodies not yet participating to participate in the Task Force, including IOTC, ASCLME, IOC, SWIOFP, etc.	Sub-regional Coordination; Fisheries Interactions	MTTF members	High
	REDUNDANT70. Synthesize existing information for the SEA+ sub-region, including existing projects, relevant MEA reports (e.g. IOSEA, CMS, ASEAN/SEAFDEC, etc.), literature and		Secretariat upon request	High

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
	identify gaps (action needs) in implementing IOSEA MOU to be discussed at a sub- regional workshop		of Signatory State, Advisory Committee	
	REDUNDANT71. Facilitate inter-sessional discussion and SEA+ sub-regional workshop to discuss the focus of sub-regional work to implement IOSEA MOU	Sub-regional Coordination	Advisory Committee, Signatory States	High
	72. Consider hosting and oOrganizeing with a host country in the region a SEA+ sub-regional meeting to facilitate coordination and discuss the establishment of a Marine Turtle Task Force (MTTF)., upon written request from the Secretariat. Thailand to consider providing support for ASEAN countries.	Sub-regional Coordination	Signatory States, Secretariat	High
	73. Organize with a host country in the region a NWIO sub-regional meeting to facilitate coordination and discuss the establishment of a Marine Turtle Task Force (MTTF). Consider hosting and organizing a NWIO sub-regional meeting, upon written request from the Secretariat.	Sub-regional Coordination	Signatory State <u>s (UAE),</u> Secretariat	High
5.3 b	Develop a web-based information resource for marine turtle conservation			
	74. Provide up-to-date lists of flipper tag series used in the countries to the IOSEA Secretariat for inclusion in and management of the existing IOSEA online database of tag series.		Secretariat Signatories, scientific institutions, NGOs <sub>1</sub>	
	75. Submit information on satellite tracking studies (in WIO countries) to the IOSEA Secretariat for inclusion in and management of the Satellite Tracking Meta-database.	Information Sharing	Secretariat Signatories, scientific institutions, NGOs-	
	75 (1). Develop page on EIA guidance based on MOS8 Documents 7.5 and 11.2 on the IOSEA website.	Information Sharing, 7 Environmental	Secretariat, Advisory Committee	

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
		Impact Assessments		
<u>5.3 f</u>	Cooperate where possible in the establishment of transboundary marine protected area	as using ecologica	al rather than p	olitical
	<ul> <li>75 (2). Liaise with counterparts in neighbouring countries regarding possibilities for developing transboundary MPAs.</li> <li>75 (3). When developing MPAs, get sound scientific advice so as to ensure boundaries are based on ecological criteria.</li> </ul>	Sub-regional Coordination,	Signatory States Signatory States	
		Habitat Protection		
5.3 g	Develop a streamlined format for reporting and exchanging information			
	76. Signatory States to Continue to improve the quality of information provided in national reports and encourage integration in National Reports, of positive substantive contributions from NGO/IGO partners.: report thoroughly on species, habitat and threat-related data using the existing IOSEA reporting system, report more thoroughly on fisheries interactions report on outcomes/impacts of measures (and not only activities conducted) encourage integration in National Reports, of positive substantive contributions from NGO/IGO partners	Reporting Nation al Reports, Information Sharing	Signatory States	High
	76 (1). Include in the analysis of the National Reports matrices indicating which countries reported implementation of different activities outlined in the reporting questionnaire.	National ReportsReportin	Secretariat	
	76 (2). Establish a working group to revise the format for National Reports.	National ReportsReportin 9	Signatory States, Advisory Committee, Secretariat	
	77. IOSEA Focal Points MTTF members are encouraged to work directly with MTTF members IOSEA Focal Points and relevant stakeholders to complete and improve the quality of data in national reports, for example, in relation to identifying specific resource	National ReportsReportin g, Information	Signatory States	High

CMP <sub>2</sub>	Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
	needs and improving data on fisheries and fisheries interactions, in particular.	Sharing		
	REDUNDANT 78. Institutionalize a process for acknowledging progress in the preparation of national reports at each meeting of the Signatory States	Reporting	Secretariat, MOS	High
	79. Consider training or webinars or any further technical help to submit national reports and use IOSEA online tools. <u>Encourage and facilitate online communications between SS and the Secretariat (eg, SS submit online reports and use online tools).</u>	National Reports, Capacity Building	Secretariat, Signatory States, Advisory Committee	
	79 (1). Encourage and facilitate online communications between SSignatories and the Secretariat (e.g., SS-submit online reports through online system and use online tools).	National Reports, Capacity Building	SecretariatAct or?	
<u>5.3 j</u>	Establish relationships with regional fisheries bodies with a view to obtaining data on i encourage them to adopt marine turtle conservation measures within EEZs and on the	ships with regional fisheries bodies with a view to obtaining data on incidental capture and o adopt marine turtle conservation measures within EEZs and on the high seas		
	79 (2). Request RFMOs to gather information and report on the occurrence, distribution and take of marine turtles in oceanic areas.	Stakeholder Engagement, Fisheries Interactions, Cooperation	Signatory States, Advisory Committee, Secretariat	
	79 (3). Revive efforts to conclude a cooperation agreement WOU with IOTC on marine turtles (_potentially as a joint arrangement in collaboration-with CMS if to include additional other protected species are to be included).	Stakeholder Engagement, Fisheries Interactions, Cooperation	Secretariat	
	79 (4). Engage with WCPFC to identify options for collaboration.	Stakeholder Engagement, Fisheries Interactions, Cooperation	Secretariat	
5.4	Build capacity			High

CMP <sub>2</sub>	Measures to be taken	Subject	<u>Lead Actors</u>	Priority <sup>3</sup>
	COMPLETED80. Develop specific guidance to Signatory States on how to implement the CMP; with flexibility for sub-regional variations	Capacity Building	AC	High
	<ul> <li>81. IOSEA Secretariat, in conjunction with the Advisory Committee members and Siganatory States, should aAdopt a proactive process for identifying needs and training within the IOSEA region: <ul> <li>a) Offer Signatory States training topic options.</li> <li>b) Develop an over-arching structure for training to be based on the Objectives of the CMP and activities in the Work Plan</li> <li>c) Structure training to address identified 'needs' of the Signatory States through tailoring content.</li> <li>d) Develop skills of sub-regional and country representatives in the preparation and revision of country reports</li> <li>e) Develop skills of Sub-regional and Country representatives and researchers in (1) collecting, analyzing, and presenting biological data, (2) defining foraging populations, and (3) conservation management techniques (interactions with fisheries, coastal development). In addition, training should emphasize communication and coordination techniques that can be used among various levels (local, province, country, sub-region, region) to coordinate conservation activities.</li> <li>— Organize follow-up visits to assess of the transfer of information and skills.</li> </ul> </li> </ul>		Secretariat, Advisory Committee members,; Signatory States	High
	82. Consider organizingEncourage organization of sub-regional capacity building / technical workshops, particularly in NWIO and NIO, including involvement of Advisory Committee. Topics could include:  a) Management of nesting beaches, hatchery management, lighting etc. b) bycatch reduction (see Section 1.4) c) Identification of threatening processes d) Rescue and rehabilitation —Conduct training on site network management. b)e) ??	Capacity Building; Hatchery Management, Fisheries Interactions, Habitat Protection, Site Network	Secretariat, AC, MTTF, Sub-Regional Focal Points	High
	REDUNDANT83. Conduct training on site network management.	Capacity Building; Habitat Protection	Nominating Signatory States in	High

Measures to be taken	Subject	<del>Lead</del> <u>Actors</u>	Priority <sup>3</sup>
		coordination with IOSEA Secretariat and AC mentors	
		Advisory Committee, Secretariat	High
fisheries operations. In particular, provide training for: <ul> <li>a) observers particularly for small-scale fisheries (separate for trawlers/ gill nets, smaller outboard fisheries in large quantities)</li> </ul>	Building.; Fisheries Interactions	Not specifiedExter nal experts, Signatory States	High
assessment methods and engagement strategies with key government authorities and stakeholders in NWIO15:  a) develop a concept note and send a formal proposal to potential hosting countries: b) government and NGOs in the region to investigate potential opportunities for organizing the workshops workshop and identify the role that each party can play c) conduct follow-up workshops to address specific issues at country level following	Building ; Fisheries interactions	IOSEA Secretariat, Signatory States, AC	High
	REDUNDANT84. Respond to specific requests for capacity-building support from Tanzania (e.g., regarding preparation of a national sea turtle conservation strategy;)) and from Madagascar; (training (for scientific personnel involved in marine turtle conservation).  85. Address associated training and technology transfer needs to reduce mortalities in fisheries operations. In particular, provide training for:  a) observers particularly for small-scale fisheries (separate for trawlers/ gill nets, smaller outboard fisheries in large quantities)  b) proper recording of turtle interactions in a harmonized and standard way, inter alia, to assist IOTC member countries in meeting their reporting requirements  c) safe release of bycaught turtles d) enhancing use of bycatch reduction technologies  86. Conduct a-sub-regionalregion-wide capacity-building workshopsworkshop on by-catch assessment methods and engagement strategies with key government authorities and stakeholders in NWIO15: a) develop a concept note and send a formal proposal to potential hosting countries: b) government and NGOs in the region to investigate potential opportunities for organizing the workshopsworkshop and identify the role that each party can play c) conduct follow-up workshops to address specific issues at country level following regional capacity building workshopsworkshop, involving fishermen—fishers	REDUNDANT84. Respond to specific requests for capacity-building support from Tanzania (e.g., regarding preparation of a national sea turtle conservation strategy;)) and from Madagasear; (training (for scientific personnel involved in marine turtle conservation).  85. Address associated training and technology transfer needs to reduce mortalities in fisheries operations. In particular, provide training for:  a) observers particularly for small-scale fisheries (separate for trawlers/ gill nets, smaller outboard fisheries in large quantities) b) proper recording of turtle interactions in a harmonized and standard way, inter alia, to assist IOTC member countries in meeting their reporting requirements c) safe release of bycaught turtles d) enhancing use of bycatch reduction technologies  86. Conduct a-sub-regionalregion-wide capacity-building workshopswerkshop on by-catch assessment methods and engagement strategies with key government authorities and stakeholders in NWIO15: a) develop a concept note and send a formal proposal to potential hosting countries: b) government and NGOs in the region to investigate potential opportunities for organizing the workshopswerkshop and identify the role that each party can play c) conduct follow-up workshops to address specific issues at country level following regional capacity building workshopswerkshop, involving fishermen—fishers associations and communities. If	REDUNDANT84. Respond to specific requests for capacity building support from Tanzania (e.g., regarding preparation of a national sea turtle conservation strategy;)) and from Madagascar; (training, (for scientific personnel involved in marine turtle conservation).  85. Address associated training and technology transfer needs to reduce mortalities in fisheries operations. In particularly for small-scale fisheries (separate for trawlers/ gill nets, smaller outboard fisheries in large quantities) b) proper recording of turtle interactions in a harmonized and standard way, inter alia, to assist IOTC member countries in meeting their reporting requirements c) safe release of bycaught turtles d) enhancing use of bycatch reduction technologies  86. Conduct a sub-regional region-wide capacity-building workshopswerkshep on by-catch assessment methods and engagement strategies with key government authorities and stakeholders in-NWIO15: a) develop a concept note and send a formal proposal to potential hosting countries: b) government and NGOs in the region to investigate potential opportunities for organizing the workshopswerkshep and identify the role that each party can play c) conduct follow-up workshops to address specific issues at country level following regional capacity building workshopswerkshep, involving fishermen—fishers associations and communities. If

<sup>15</sup> This activity was ranked high priority in the source document
16 Note: The involvement of experts, policy/administrative government officials and fishermen is important to be considered at different stages of engagement and during these workshops - the role of NGOs providing the links between government and fishermen associations/communities should to be considered

CMP <sub>2</sub>	Measures to be taken	Subject	<b>Lead</b> Actors	Priority <sup>3</sup>
	fishermen is important to be considered at different stages of engagement and during these workshops - the role of NGOs providing the links between government and fishermen associations/communities should to be considered			
	86 (1). Consider activities to address capacity-building needs to integrate marine turtle considerations into existing Ramsar Site management plans, and consider cooperating with the Ramsar Secretariat to raise funds for implementing these activities.	Capacity Building, Cooperation, Funding	Advisory Committee, Signatory States, Secretariat	
	86 (2). Consider soliciting capacity-building support to conduct coordinated or joined activities fFor sites that are both IOSEA Network Sites and Ramsar Sites, from the IOSEA and Ramsar Secretariatsconsider solicitinge capacity-building support from the IOSEA and Ramsar Secretariats to conduct coordinated or joined activities.	Capacity Building, Cooperation	Signatory States, Secretariat, NGOs	
<u>5.4 i.</u>	i. Encourage Signatory States to become Parties to global fisheries agreements such as the UN Fish Stocks Agreement (19 and the FAO Compliance Agreement (1993) and implement the FAO Code of Conduct for Responsible Fisheries (1995)			1995)
	86 (3). Identify relevant Agreements and provide an overview of membership of IOSEA Signatory States to MOS9.		Secretariat	
5.5	Strengthen and improve enforcement of conservation policies			High
	87. Improve enforcement of compliance with <u>fishing regulations</u> , <u>relating to activities such as fishing 17</u> , tourism, coastal development, industrial development, international trade <u>restrictions</u> . 18	Fisheries interactions, Tourism	Not specifiedSign atory States	High
6	Objective 6. Promote implementation of the MoU including the Conservation and Mana	gement Plan		
6.1	MOU membership and legal status			
	88. Approach <u>non-Signatory States in the IOSEA region and other</u> the following priority countries <u>, such as China, Japan, the Republic of Korea,</u> with a view to securing IOSEA membership: China, Japan, Malaysia, Republic of Korea, Timor-Leste		Signatory States, SEA sub-region, Secretariat	

<sup>17</sup> Similar to CMP 5.5 b)
18 Similar to CMP 5.5 b)

CMP <sub>2</sub>	Measures to be taken	Subject	<b>Lead</b> Actors	Priority <sup>3</sup>
6.2	89. Engage with the Indian Ocean Tuna Commission, the Western and Central Pacific Fisheries Commission, and the FAO Committee on Fisheries (COFI), as well as other RFMOs relevant to the IOSEA, In relation to those regarding to reach out to countries non-Signatory States with fleets fishing in the IOSEA region (e.g. China / Taiwan, Japan, Republic of Korea, Spain etc).: seek advice / support from, and provide input to, the Indian Ocean Tuna Commission, the Western and Central Pacific Fisheries Commission, and the FAO Committee on Fisheries (COFI), as well as other RFMOs relevant to the IOSEA  Promote the role of Secretariat and Advisory Committee	Stakeholder Engagement, Cooperation, Fisheries Interactions	Signatory States, Secretariat	
0.2	90. Periodically assess the appropriateness of the size and composition (skill sets) of the Advisory Committee	Effectiveness of the Advisory Committee	MOS, AC	
	90 (1). Arrange two intersessional meetings of the Advisory Committee, the first one within the first 18 months after a MOS, the second one three or four months before the next MOS, to facilitate efficient communication regarding the implementation of the Work Programme.	Effectiveness of the Advisory Committee	Secretariat	
	91. Secure adequate resources for the Advisory Committee to function effectively (e.g. through enhanced communication, increased frequency of meetings, strengthened capacity to respond to requests from Signatory States, etc.)	Effectiveness of the Advisory Committee	MOSSignator y States	
	92. Facilitate attendance of Sub-regional Enable Focal Points and Chairs of the sub-regional Marine Turtle Task Forces and as observers at Advisory Committee Meetings to provide advice on core issues to be addressed at Signatory States meetings. (This could be facilitated by earlier circulation of the implementation synthesis.)	Procedural <u>Institu</u> tional	Sub-regional Focal Points, (including SFPs) Advisory Committee, -/ Secretariat	
	93. Seek periodic feedback from Signatory States through the national reports and the Advisory Committee on the general effectiveness of IOSEA, role, current priorities, etc. for consideration by the Meeting of Signatory States	Evaluation	Secretariat,  MOSSignator  y States, AC	
	94. Prepare a periodic 'State of the IOSEA' report, with greater focus on The Advisory  Committee should -review, comment, and -provide guidance on enadvances and new and emerging issues related to trends in identifiable species and habitat management units; in	Evaluation	Secretariat, AC, possibly including a	

CMP <sub>2</sub>	Measures to be taken	Subject	<b>Lead</b> Actors	Priority <sup>3</sup>
	addition to current monitoring of performance against the objectives of the MOU. The Advisory Committee should play a greater role in reviewing /commenting / providing guidance on the regular implementation synthesis		third party?	
	95. Ensure that the CMP maintains its relevance and addresses emerging issues, by periodically reviewing and updating its provisions, in response to performance assessment outcomes or proposals from Signatory States or others In advance of each Meeting of the Signatory States MOS, provide advice on a new Work Programme to implement the CMP	Procedural Institutional	Inter- sessional Working Group, with involvement of the Advisory Committee	
6.3	Seek resources to support the implementation of the MoU			High
	96. Assist countries to seek available counterpart funding (e.g. by helping with <u>national or regional</u> project proposal development, offering guidance on "packaging" of proposals, facilitating links to potential donors, <u>providing letters of support</u> , etc.)	Capacity  BildingBuilding, ; Funding	Adequately re- sourcedAdvis ory Committee, Secretariat er an entity engaged by the Secretariat	High
	REDUNDANT 97. Encourage preparation of multi-country proposals for possible small-scale funding support (e.g. through the United States' Marine Turtle Conservation Act funding) and consider untapped funding sources, such as the EU.	Funding	Secretariat / Signatory States	High RED UND ANT
	REDUNDANT98. Consider setting up a working group of Signatory States to look into the possibility and mechanics of creating an IOSEA Endowment Fund to provide seed funding, training, resources, equipment etc. to Signatory States.  The endowment fund might be created from: Signatory States' contributions, with one component (perhaps 10-15%) used for immediate	Funding	Meeting of Signatory States / Working Group /	Highs ee budg et docu

CMP <sub>2</sub>	Measures to be taken	Subject	<u>Lead</u> Actors	Priority <sup>3</sup>
	operational purposes and one component dedicated to longer-term sustainability of the IOSEA and specialized project funding; and contributions from other sources, raised through additional fund-raising activities a prerequisite for obtaining assistance should be self-assessment and effective articulation of in-country needs		Secretariat or an entity engaged by the Secretariat	ment
6.4	Improve coordination among government and non-government sectors			
	REDUNDANT 99. Encourage and develop synergies between governments and NGO partners <sup>19</sup>	National Networks	Signatory States	RED UND ANT
	100. Encourage governments to establishe Establish inclusive national committees/networks by compiling examples of current practice in order to develop synergies between among governments and NGO partners	National Networks, Stakeholder Engagement	Signatory States	

<sup>19</sup> Similar to CMP 6.4 20 Similar to 6.4 c)

Measures to be taken	<u>Lead Actors</u>
Section 2: Measures Related to MOU Administration and Coordination <sup>21</sup>	
Meetings, Working Groups and Workshops	
101. Ensure Advisory Committee Meetings are organized as scheduled, with papers circulated at least one month in advance of the meetings.	Secretariat, Advisory Committee
102. Facilitate conference calls with the Advisory Committee on a quarterly basis to discuss and facilitate progress in the implementation of the WP	Secretariat
103. Ensure Meetings of Signatory States (MOS) are organized as scheduled, with key papers circulated <u>at least</u> two months in advance of the meetings	Secretariat
104. Organize meetings of sub-regional groups and assist with organization of the meetings of Marine Turtle Task Forces (NIO, WIO MTTF, NWIO and SEA+ sub-regions) at intervals defined in each group's ToR.	Secretariat
105. Support intersessional correspondence (Illegal Trade Working Group, Site Network Discussion Group, Advisory Committee) as needed.	Secretariat
106. Organize workshops if agreed by MOS8 and subject to available funding.	Secretariat
107. Secure a host for MOS9 and correspond with the host to ensure all necessary arrangements are met for next MOS.	Secretariat
Website	
108. Maintain and develop the IOSEA website, post news items and other material as appropriate. Reach out to IOSEA intersessional working groups, Signatories and stakeholders to solicit their input and publish relevant information in the website news section.	Secretariat, Signatory States, Advisory Committee, MTTFs, NGOs
<ul> <li>109. Restore selected functions on IOSEA website:</li> <li>a) Continue work to restore and update IOSEA bibliography and library in collaboration with the AC and set up the electronic bibliography on the IOSEA Website</li> </ul>	Secretariat
<ul> <li>b) Restore and update flipper tag database in collaboration with government authorities, research institutions, MTTF members and other relevant stakeholders</li> <li>c) As time and resources allow, address restoring of: project database, satellite tracking database, genetic directory.</li> </ul>	

<sup>&</sup>lt;sup>21</sup> If not yet included in Section 1

Budgetary and Administrative Matters	
110. Administer the MOU's Trust Fund in collaboration with the CMS Administrative and Fund Management Unit and report on budgetary and administrative issues to each meeting of the Signatory States, and <a href="intersessionallyinter-sessionally">intersessionallyinter-sessionally</a> as required.	Secretariat
111. Prepare a draft budget for consideration by MOS9.	Secretariat
112. Encourage Signatories to pay agreed voluntary contributions and encourage voluntary contributions for projects and initiatives prioritized by the AC and MOS9	Secretariat
113. Develop funding agreements for projects prioritized by the Meeting of Signatories.	Secretariat
114. Advertise consultancies, select and supervise candidates as required for the implementation of the WP.	Secretariat

CMP	Measures to be taken	Subject	<u>Lead Actors</u>	Priority		
	Section 3 Measures without corresponding CMP Programmes					
	Other Matters					
	115. Offer Signatory States the opportunity to designate both administrative and technical Focal Points	Institutional	Meeting of Signatory States. / Secretariat			
	116. On advice from Focal Points and/or Advisory Committee, consider designating selected Ministers as IOSEA patrons  Focal Points, Advisory Committee, Secretariat					
	117. Explore options to formalize inter-sessional decision-making (e.g-, a form of a permanent standing committeethrough Sub-regional Focal Points) and/or develop a clear procedure agreed upon by all Signatory States	Institutional	Meeting of Signatory States → Secretariat			
	118. Organize sub-regional working groups more effectively during Signatory State meetings, by engaging Sub-regional Focal Points more actively in pre-meeting organization (ideally Sub-regional Focal Points should be individuals who are likely to be in the post for a longer period of time, to provide continuity, and be knowledgeable/experienced in key IOSEA matters).		Sub-regional Focal Points. Secretariat			

### Part II: CMP Objectives and Programmes that are not Addressed in the Draft WP 2020-2024

- 15. Part II of the document includes the programmes and activities of the Conservation and Management Plan that do not have corresponding measures in the current Draft WP.
- 16. Table 4 below shows that a number of CMP Objectives and Programmes are currently without corresponding recommended measures. This includes issues directly relating to priorities identified by the Signatories, such as activities to establish/improve nesting beach management and to rehabilitate degraded habitats. In relation to illegal and legal take and trade, sustainability of traditional harvest, correcting adverse economic incentives, and improving compliance with CITES are not being addressed, among other issues. MOS8 is thus requested to take these identified gaps into account when working on the WP 2020-2024 with the assistance of the Advisory Committee.

Table 4: CMP Objectives and Programmes without corresponding existing recommendations

#### **CMP Programmes and activities**

- 1.1 Identify and document the threats to marine turtle populations and their habitats
- 1.1 c) Determine those populations affected by traditional and direct harvest, incidental capture in fisheries, and other sources of mortality
- 1.2 Determine and apply best practice approaches to minimising those threats to marine turtle populations and their habitats
- 1.2 b) Adapt and adopt the best conservation and management practices for marine turtle populations
- 1.3 Implement programmes to correct adverse economic incentives that threaten marine turtle populations
- 1.3 b) Identify desired modifications to the economic incentives in order to reduce threats and mortality, and develop programmes to implement the modifications
- 1.4 Reduce to the greatest extent practicable the incidental capture and mortality of marine turtles in the course of fishing activities
- 1.4 e) Support the UN General Assembly resolution 46/215 concerning the moratorium on the use of large-scale driftnets on the high seas
- 1.4 f) Develop and implement net retention and recycling schemes to minimise the disposal of fishing gear at sea and on beaches
- 1.5 b) Assess the level and impact of traditional harvest on marine turtles and their eggs
- 1.5 Prohibit the direct harvest (capture or killing) of, and domestic trade in, marine turtles, their eggs, parts or products, whilst allowing exceptions for traditional harvest by communities
- 1.5 c) Establish management programmes that may include limits on levels of intentional harvest
- 1.6 Develop nesting beach management programmes to maximize hatchling recruitment
- 1.6 Develop nesting beach management programmes to maximize hatchling recruitment
- 1.6 a) Evaluate the effectiveness of nest and beach management programmes
- 1.6 b) Reduce the mortality of eggs and hatchlings to maximise hatchling recruitment and survival, preferably using conservation techniques that emphasize natural processes wherever possible

#### **CMP Programmes and activities**

1.6 c) Minimize the mortality of eggs, hatchlings and nesting female turtles caused by feral and domestic animal

#### 2.1 Establish necessary measures to protect and conserve marine turtle habitats

- 2.1 e) Manage and regulate within each jurisdiction the use of beaches and coastal dunes, for example location and design of buildings, use of artificial lighting, and transit of vehicles in nesting areas
- 2.1 g) Strengthen the application of existing bans on the use of poisonous chemicals and explosives in the exploitation of marine resources

#### 2.2 Rehabilitate degraded marine turtle habitats

- 2.2 a) Re-vegetate, where appropriate, frontal dunes at nesting beaches, with indigenous flora as far as possible, in order to provide visual barriers to coastal development and to restore appropriate beach temperature regimes
- 2.2 b) Remove debris that impedes turtle nesting and hatchling production
- 2.2 c) Enhance recovery of degraded coral reefs
- 2.2 d) Enhance recovery of degraded mangrove and seagrass habitats

# 3.1 Conduct studies on marine turtles and their habitats targeted to their conservation and management

- 3.1 f) Conduct research on the frequency and pathology of diseases of marine turtles
- 3.1 g) Promote the use of traditional ecological knowledge in research studies
- 3.1 h) Review periodically and evaluate research and monitoring activities

## 3.3 Analyse data to support mitigation of threats and to assess and improve conservation practices

- 3.3 a) Prioritise populations for conservation actions
- 3.3 b) Identify population trends

#### 3.4 Exchange information

- 3.4 c) Exchange at regular intervals scientific and technical information and expertise among nations, scientific institutions, non-governmental and international organizations, in order to develop and implement best practice approaches to conservation of marine turtles and their habitats
- 3.4 d) Disseminate traditional knowledge on marine turtles and their habitats for conservation and management
- 3.4 e) Compile on a regular basis data on marine turtle populations of regional interest

#### 4.3 Promote public participation

- a) Involve stakeholders, and local communities in particular, in planning and implementation of conservation and management measures
- 4.3 c) Implement, where appropriate, incentive schemes to encourage public participation (e.g. T-shirts for tag returns, public acknowledgement, certificates)

## 5.1 Collaborate with and assist Signatory and non-Signatory States to regulate and share information on trade, to combat illegal trade, and to cooperate in enforcement

- 5.1 a) Encourage Signatory States that have not already done so to become Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- 5.1 b) Review at a national level compliance with obligations under CITES relating to trade in marine turtles, their eggs, parts or products
- 5.1 c) Facilitate better compliance with CITES through training of relevant authorities in cooperation with other signatory States, the CITES Secretariat and other relevant

#### **CMP Programmes and activities**

#### organisations

- 5.1 e) Exchange and discuss information on compliance and trade issues at regular intervals, such as through annual reporting to the MoU Secretariat and at meetings of the signatory States
- 5.1 f) Identify, prevent, deter and, where possible, eliminate domestic illegal trade through monitoring, implementation of legislation, identification of gaps in enforcement capabilities in each country, and training of enforcement officers

## 5.2 Assist Signatory and non-Signatory States, upon request, to develop and implement national, sub-regional and regional action plans

5.2 d) Review (national) action plans at regular intervals to take into account recent advances in skills and knowledge regarding marine turtle conservation and management, as well as changes in conservation status of marine turtle populations

#### 5.3 Enhance mechanisms for cooperation and promote information exchange

5.3 f) Cooperate where possible in the establishment of transboundary marine protected areas using ecological rather than political boundaries

#### 5.4 Build capacity to strengthen conservation measures

5.4 i) Encourage Signatory States to become Parties to global fisheries agreements such as the UN Fish Stocks Agreement (1995) and the FAO Compliance Agreement (1993) and implement the FAO Code of Conduct for Responsible Fisheries (1995)

#### 5.5 Strengthen and improve enforcement of conservation legislation

- 5.5 a) Review domestic policies and laws to address gaps or impediments to marine turtle conservation
- 5.5 b) Cooperate in law enforcement to ensure compatible application of laws across and between jurisdictions (including through bilateral/multilateral agreements and intelligence sharing)