



**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.8.1

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8TH MEETING OF THE SIGNATORY STATES

Da Nang, Viet Nam, 21-25 October 2019

Agenda Item 8.1

SYNTHESIS OF EXISTING RECOMMENDATIONS

(Prepared by the Secretariat)

Action Requested:

- Take note of the document in preparation for the discussion of the Draft IOSEA Work Programme;
- Consider relevance of recommendations for the development of the IOSEA Work Programme.

Introduction

1. In the 18 years since the MOU came into existence, a wide variety of matters have been discussed, agreed and implemented. However, there appears to be no systematic record of what happened to past recommendations, many of which are spread over many documents, and their status is not always clear. For example, the outcomes of the Meetings of Signatories are presented in comprehensive MOS reports, which include records of discussions and recommendations made, some of which are reflected in the lists of action points appended to the report. Others are, however, found in different sections across the reports. Furthermore, not all work streams are reflected in MOS reports. For example, the two sub-regional Marine Turtle Task Forces (MTTFs) serving the Northern and Western Indian Ocean regions make their own recommendations in separate discussions, some of which may be useful for other sub-regions as well. Additionally, the recommendations of the Strategic Planning Meeting, which was tasked by MOS5 with discussing the future direction of the MOU likewise were not included in the subsequent MOS reports.
2. Both for new Focal Points and for the new Secretariat, this spread makes it difficult to benefit fully from the wealth of discussions and resulting recommendations made and ensure adequate follow-up. The Secretariat therefore decided to create the present synthesis to collect all recent recommendations in one reference document and facilitate continuity in the work of the MOU.
3. The synthesis of existing recommendations is intended to serve as a reference document and as background to facilitate the discussion and drafting of the IOSEA Work Programme. It is based on the following documents:
 - [Report of the Seventh Meeting of IOSEA Signatory States \(MOS7 Meeting report\)](#), including MOS7 Action Points (Annex 8) and Priority Projects resulting from the updated Loggerhead (2013) and Leatherback (2012) assessments (Annex 7, Appendix IV and V); Summary of The Western Indian Ocean (WIO) Working Group Discussions; Summary of the Northern Indian Ocean (NIO) Working Group Discussions; Summary of the Northwest Indian Ocean (NWIO) Working Group Discussions; Summary of the South-east Asia (SEA+) Working Group Discussions.
 - Several MOS7 Documents:
 - o MOS7/Doc.08 [Further Development of the IOSEA Technical Support / Capacity-Building Programme](#)
 - o MOS7/Doc.09 [Recommendations Arising from Species Assessments \(Leatherback and Loggerhead\)](#)
 - o MOS7/Doc.10.1 [Illegal Take and Trade of Marine Turtles in the IOSEA Region](#)
 - o MOS7/Doc.10.2 [Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps](#)
 - o MOS7/Doc.10.3 [Socio-Economic and Cultural Implications of Marine Turtle Use and Conservation](#)
 - o MOS7/Doc.10.4 [Insights into Indian Ocean Fisheries-Turtle Interactions](#)
 - [Report of the 7th Meeting of The Western Indian Ocean Marine Turtle Task Force, including the Work Programme of the Western Indian Ocean – Marine Turtle Task Force: Work Plan 2017-2019](#)

- [Report of the 2nd Meeting of The Northern Indian Ocean Marine Turtle Task Force, including Work Programme of the Northern Indian Ocean – Marine Turtle Task Force 2017-2020](#)
- IOSEA-level Challenges and Selected Actions to Address them from the [Report of the IOSEA Strategic Planning Meeting](#) (2009)

Structure of the document

4. The document consists of three parts:
 - Part I contains a table with all existing recommendations which were clearly and succinctly formulated.
 - Part II contains important notes on socio-economic aspects, which were not as clearly framed as recommendations, but can be understood as such, and
 - Part III contains conservation priorities of Signatory States extracted from MOS7/Doc.06 "[Part II: Detailed analysis of national reports, excluding site-based information](#)".
5. There are 3 annexes to this document, which contain recommendations from sub-regional discussions and from other fora that list measures to be conducted in specific locations or sub-regions. The annexes contain recommendations for the four sub-regions, as follows:
Annex 1 Northern Indian Ocean
Annex 2: Northwestern Indian Ocean
Annex 3 Western Indian Ocean
Annex 4: Southeast Asia+.
6. Note: Only recommendations were extracted from the above-mentioned documents. For background and in-depth information on any of the indicated topics, please refer to the original documents (following the links above). The documents included in this synthesis were selected by the Secretariat in consultation with the Advisory Committee.

Part I: Synthesis of existing recommendations

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
1. Encourage and support development of national action plans: a) Compile/provide examples of National Action Plans for review and possible adaption by Signatory States to other contexts 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).	Advisory Committee	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	5.2	Capacity Building
2. Assist countries to seek available counterpart funding (e.g. by helping with project proposal development, offering guidance on “packaging” of proposals, facilitating links to potential donors etc.)	Adequately resourced Secretariat or an entity engaged by the Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6, 5.4	Capacity Building
3. Develop additional, more specific guidance to Signatory States on how to implement the Conservation and Management Plan (CMP); with flexibility for sub-regional variations	Advisory Committee	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	5.4	Capacity Building
4. IOSEA Secretariat, in conjunction with the Advisory Committee members, should adopt a proactive process for training within the IOSEA region, including: a) Becoming proactive in delivering training within the regions by offering Signatory Countries training topic options. b) Developing an over-arching structure for training that addresses the identified needs of the Signatory States. c) Structuring training to be based on the Objectives of the CMP to address identified ‘needs’ of the Signatory States through tailoring content.		Further Development of the IOSEA Technical Support / Capacity-Building Programme	5.4	Capacity Building

¹ Corresponding Objective and/or Programme of the Conservation and Management Plan of the MOU

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
<p>d) Developing skills of Sub-regional and Country representatives in the preparation and revision of country reports</p> <p>e) Developing 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.</p> <p>f) Evaluating all training programmes by follow-up visits to assess of the transfer of information and skills.</p> <p>g) Identifying individuals who can and will deliver the training. These people should be from among the Advisory Committee members and other individuals from within the region and beyond who will contribute through information exchange and hands-on experience for trainees.</p> <p>h) Offering training to Signatory Countries, and accepting requests from them for training, in specific areas of marine turtle biology, conservation, and management at little or no cost for training in specific areas. IOSEA has relied on countries making application for training and the response has not been large. Turning the situation around should facilitate greater use of the training available.</p> <p>i) Soliciting funds to offset the majority of costs associated with delivery of the training (including travel, accommodation, materials). Probably the largest impediment to the functioning of the IOSEA training initiative is funding rather than interest. Such initiatives are expensive and IOSEA needs to secure funding to</p>				

Recommendation	Lead/ responsible	Source	CMP¹	Subject
support much of the training. Additional underwriting of local costs could improve the use of the training offered.				
5. Develop an IOSEA-level communication plan, and work with Focal Points to develop targeted IOSEA communication plans at the national level	Secretariat and Focal Points (supported by specialized project consultancy)	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6	Communication
6. Periodically recognize and acknowledge noteworthy contributions to IOSEA implementation (by Signatory States, organizations, corporate sector, individuals etc.)	Meeting of Signatory States / Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6	Communication
7. Periodically assess the appropriateness of the size and composition (skill sets) of the Advisory Committee	Meeting of Signatory States, with Advisory Committee input	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6	Effectiveness of the Advisory Committee
8. 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.)	Meeting of Signatory States	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6; 6.3	Effectiveness of the Advisory Committee
9. Offer Signatory States the opportunity to designate both administrative and technical Focal Points	Meeting of Signatory States / Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	none	Engagement of Signatory States
10. Create/identify incentives for Focal Points to participate more actively and effectively in IOSEA business intersessionally (e.g. solicit from Focal Points a broad country plan for each reporting period)	Meeting of Signatory States Secretariat, Sub-regional Focal Points	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	5	Engagement of Signatory States

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
11. Encourage greater use of Advisory Committee resources by Signatory States	Meeting of Signatory States / Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6; 6.2	Engagement of Signatory States
12. Provide support and recommendations to Signatory States on the importance of integrating sea turtle conservation into EIA processes; consider incorporating progress updates on EIA implementation in national reporting; and possibly analyze how EIA processes are implemented in each country.	Secretariat, Advisory Committee	MOS7 Action Points	2; 5; 5.4	Environmental Impact Assessment
13. Seek periodic feedback from Signatory States on general IOSEA effectiveness, role, current priorities etc. for consideration by the Meeting of Signatory States	Secretariat / Meeting of Signatory States	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	none	Evaluation
14. Prepare a periodic 'State of the IOSEA' report, with greater focus on trends in identifiable species management units; in 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	Secretariat / Advisory Committee, possibly with assistance from an independent third party	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	5	Evaluation
15. Conduct assessments, or utilize existing assessments, of the distribution of Indian Ocean fishing effort and turtle distribution to provide an evidence-based argument for the need for action	Specialized project consultancy	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	1	Fisheries Interactions
16. Determine the spatial and temporal variation in distribution of fishing effort: a) Determine impact on non-target species and bycatch hot spots b) Use this information to manage bycatch	States of the IOSEA region	Recommendations for Leatherback and Loggerhead turtle conservation, MT-IOSEA/SS.7/Doc. 9	1	Fisheries Interactions

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
17. Establish national and/or regional bycatch mitigation projects (including gear modification, TEDs and improved fishing practices to reduce bycatch).	Nations of the IOSEA region and Nations (outside IOSEA) deploying foreign fishing fleets into the region. International fisheries management agencies	Recommendations for Leatherback and Loggerhead turtle conservation, MT-IOSEA/SS.7/Doc. 9	1	Fisheries Interactions
18. Present concerns to IOTC/WPEB regarding sources of turtle mortality including FADs and gill nets, based on new information that comes to light. Continue to contribute to the IOTC Executive Summary on marine turtles.	Secretariat, Advisory Committee	MOS7 Action Points	1	Fisheries Interactions
19. Secretariat to assess current RFMO resolutions and active conservation management measures, including data collection requirements. Advisory Committee to advise on any other data needed to fulfill minimum data requirements. Findings from the above work to be presented to the IOTC Working Party on Ecosystems and By-catch (WPEB).	Secretariat, Advisory Committee	MOS7 Action Points	1	Fisheries Interactions
20. Initiate/continue dialogue about IOSEA issues among Signatory States that are also IOTC members in advance of each meeting of IOTC (including subsidiary bodies) and intervene as appropriate.	Signatory States	MOS7 Action Points	2; 5	Fisheries Interactions

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
<p>21. Collect species-specific bycatch data from fisheries in coastal and oceanic zones of the Indian Ocean:</p> <p>a) Establish national observer, assessment and quantification programs, inter alia, assessing the impact on different turtle life stages</p> <p>b) Collect mortality data related to bycatch, and skin samples for genetic analysis to determine stock-specific impacts</p>	<p>Nations of the IOSEA region and nations (outside IOSEA) deploying foreign fishing fleets into the region. International fisheries management agencies</p>	<p>Recommendations for Leatherback and Loggerhead Turtle conservation, MT-IOSEA/SS.7/Doc. 9;</p>	<p>3; 1</p>	<p>Fisheries Interactions</p>
<p>22. 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)</p>	<p>Specialised project consultancy</p>	<p>Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them</p>	<p>1.4; 4.3</p>	<p>Fisheries Interactions</p>
<p>23. Consider a mechanism for providing, through the IOSEA Endowment Fund, seed funding, training, resources, equipment etc. to Signatory States in need</p>	<p>Meeting of Signatory States / Working Group</p>	<p>Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them</p>	<p>6</p>	<p>Funding Implementation</p>
<p>24. Encourage preparation of multi-country proposals for possible small-scale funding support (e.g. through United States' Marine Turtle Conservation Act funding)</p>	<p>Secretariat / Signatory States</p>	<p>Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them</p>	<p>6</p>	<p>Funding Implementation</p>
<p>25. Encourage/assist self-assessment and better articulation of domestic resource needs as a prerequisite to helping mobilize IOSEA-level funding and in-kind support. Identify impediments to provision of this information and, as necessary, seek other ways of eliciting it</p>	<p>Signatory States / Secretariat</p>	<p>Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them</p>	<p>6</p>	<p>Funding Implementation</p>

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
<p>26. Set up a working group of Signatory States to look into the mechanics of creating an endowment fund appropriate to different circumstances in each country. The endowment fund might be created from:</p> <p>a) Signatory States' contributions, with one component (perhaps 10-15%) used for immediate operational purposes and one component dedicated to longer-term sustainability of the IOSEA and specialized project funding; and</p> <p>b) contributions from other sources, raised through additional fund-raising activities</p>	<p>Meeting of Signatory States / Working Group Secretariat or an entity engaged by the Secretariat</p>	<p>Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them</p>	<p>6.3</p>	<p>Funding Implementation</p>
<p>27. Investigate possible new sources of funding, hitherto untapped, particularly through the European Union</p>	<p>Secretariat, Signatory States</p>	<p>Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them</p>	<p>6</p>	<p>Funding Implementation</p>
<p>28. Countries to incorporate genetic sampling into their ongoing monitoring activities (subject to budget and resources available)</p>	<p>Signatory States</p>	<p>MOS7 Action Points</p>	<p>3; 3.1c)</p>	<p>Genetics</p>
<p>29. Determine stock specific threats to be used as a base for monitoring and management:</p> <p>a) Perform genetic analysis on bycaught, stranded and confiscated specimen and record results systematically</p> <p>b) Using genetic markers identified for nesting populations, determine population structure of marine turtle bycatch or stranded turtles</p>	<p>IOSEA States, Countries with Leatherback Turtle bycatch programmes and/or direct take [Australia, Eritrea, Sri Lanka, South Africa (shark nets) & Indonesia (Kei Is.)]</p>	<p>Recommendations for Leatherback Turtle conservation, MT-IOSEA/SS.7/Doc. 9</p>	<p>3</p>	<p>Genetics</p>

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
30. Identify management units for Loggerhead Turtles in the IOSEA region, starting with Sri-Lanka	Sri Lanka (Dept. of Wildlife and/or NGOs; and cooperating countries for sample analysis	Recommendations for Loggerhead Turtle conservation, MT-IOSEA/SS.7/Doc. 9	3	Genetics
31. Identify needs and opportunities for regional analyses to inform stock assessment. On request, Advisory Committee to provide guidance on collection protocols and facilitate contacts with labs; Secretariat to facilitate contacts with CITES authorities.	Advisory Committee, Secretariat	MOS7 Action Points	3	Genetics
32. Improve understanding of the genetic structure of Leatherback Turtles nesting down through the Andaman Sea, southern Indonesia to northern Australia and in Sri Lanka: a) Determine the genotype of Leatherback Turtles nesting in Sri Lanka, India, Thailand and Indonesia [Sumatra] and compare these with published haplotypes	IOSEA States	Recommendations for Leatherback Turtle conservation, MT-IOSEA/SS.7/Doc. 9	3	Genetics
33. Rather than relying on the Regional Management Unit (RMU) maps given in Wallace et al. (2011), countries should develop maps for each genetic stock indicating rookery locations and habitat use in pelagic and benthic environments.	Signatory States, scientific institutions, NGOs	Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps	3.1	Genetics
34. Continue to identify critical habitats	IOSEA States	Recommendations for Leatherback turtle conservation, MT-IOSEA/SS.7/Doc. 9	2	Habitat Protection
35. Explore the potential use of possible certification schemes through multinational companies and organizations involved in coastal tourism and development that may be impacting turtle habitat)	Specialized project consultancy	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	2; 4.3	Habitat Protection

Recommendation	Lead/ responsible	Source	CMP¹	Subject
36. Protect and adequately manage already identified critical habitats, creating marine protected area networks to provide management across different critical habitats	IOSEA States	Recommendations for Leatherback turtle conservation, MT-IOSEA/SS.7/Doc. 9	2	Habitat Protection
37. 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, as part of a joint submission (with the IAC Secretariat) to CITES COP17 (South Africa, 2016)	Secretariat	MOS7 Action Points	4 ;5	Illegal Take and Trade
38. Establish a working group to address issues related to turtle trade.	Signatory States, Secretariat, Advisory Committee	MOS7 Action Points	5; 5.1	Illegal Take and Trade
39. Harmonize national legislation within countries to address illegal take and trade (e.g. Malaysia and Japan)	Signatory States	Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps	5.1	Illegal Take and Trade
40. Improve enforcement of national legislation to address illegal take and trade particularly in (but not limited to) Indonesia, Kenya, Madagascar, Malaysia, Philippines, United Republic of Tanzania, Viet Nam and China (non-Signatory):	Signatory States	Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps	5.1	Illegal Take and Trade
41. Strengthen bilateral and international cooperation in enforcement, through existing networks or possibly new trans-national partnerships between countries that are linked by illegal exports and imports.	Signatory States	Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps	5.1	Illegal Take and Trade
42. Undertake research and develop more targeted strategies to address issues of supply and demand, incorporating traditional knowledge and practices and focus particularly on hotspots where important sources of turtles or trade routes have been identified, such as Indonesia, Madagascar, and China (Hainan province)	Signatory States, NGOs, scientific institutions	Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps	5.1	Illegal Take and Trade

Recommendation	Lead/ responsible	Source	CMP¹	Subject
43. Consider applying innovative techniques such as the Community Voice Method (CVM) to ensure that concerns of resource-users are incorporated in decision-making	Signatory States, NGOs, scientific institutions	Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps	5.1	Illegal Take and Trade
44. Develop alternative livelihoods, such as ecotourism, using examples of good practice to ensure genuinely sustainable approaches, which will be beneficial in the long run for both humans and turtle populations	Signatory States, NGOs, scientific institutions	Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps	5.1	Illegal Take and Trade
45. Develop awareness campaigns that target particularly consumers of turtle products, who are not driven by economic incentives, and who may be unaware of the existing regulations and issues involved (e.g. tourists, well to do egg consumers, vendors, local public)	Signatory States, NGOs, scientific institutions	Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps	5.1	Illegal Take and Trade
46. Use examples and lessons learned from previous awareness campaigns to develop successful approaches, evaluate and document lessons learned of your campaigns	Signatory States, NGOs, scientific institutions	Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps	5.1	Illegal Take and Trade
47. Consider using ASEAN-WEN as an example to establish similar networks in other IOSEA Sub-regions and using existing networks and other relevant platforms, such as SAWEN to ensure that their work includes monitoring of and fighting against illegal marine turtle trade	Signatory States	Marine Turtle Genetic Stocks of the Indo-Pacific: Identifying Boundaries and Knowledge Gaps	5.1	Illegal Take and Trade
48. Allocate individual responsibility within the Advisory Committee to support Focal Points in countries within particular sub-regional groups	Advisory Committee / Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	none	Implementation Support
49. Use the vehicle of IOSEA resolutions more proactively, but judiciously, to call attention to general and country-specific issues of concern	Meeting of Signatory States	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	none	Implementation Support

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
50. Cross-reference the IOSEA CMP as far as possible in other documents and national plans (i.e. use it as a starting point / basis for elaboration of NAPs)	Signatory States	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6	Implementation Support
51. Signatory States should consider short-term secondment of staff to the IOSEA Secretariat to fill specific needs	Signatory States	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6	Implementation Support
52. Assess the impact of ghost nets and plastic pollution	Signatory States	Recommendations for Leatherback turtle conservation, MT-IOSEA/SS.7/Doc. 9	2;1	Marine Debris
53. Assess vulnerability of Loggerhead Turtles to marine debris (particularly plastic): a) Investigate transport and abundance of marine debris in the Indian Ocean, marine debris ingestion rates, and vulnerability b) Investigate impact on each genetic stock/population/management unit	National, regional, international organizations concerned with marine debris (cooperative studies, modelling etc.)	Recommendations for Loggerhead turtle conservation, MT-IOSEA/SS.7/Doc. 9	1	Marine Debris, Loggerhead
54. Encourage governments to establish inclusive national committees/networks by compiling examples of current practice	Secretariat / Signatory States	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6 ; 6.4	National Networks
55. Establish linkages with other relevant initiatives, such as seaturtle.org's web directory of information and people; International Sea Turtle Symposium; and global and regional newsletters. Specific examples of potential opportunities:	Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	5; 5.3	Networking

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
<ul style="list-style-type: none"> a) Northwest Indian Ocean: Seek areas of collaboration and cooperation with PERSGA and ROPME b) Northern Indian Ocean: identify potential mechanisms for sub-regional cooperation in South Asia (e.g. SAARC) c) Southeast Asia: consider development of a MoU with SEAFDEC; engage Coral Triangle Initiative d) General: Explore possible synergies with RFMOs. CMS Dugong MOU, other turtle agreements, and SPREP (in the Pacific) 				
56. On advice from Focal Points and/or Advisory Committee, consider designating selected Ministers as IOSEA patrons	Focal Points, Advisory Committee, Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	none	Political Profile
57. Organize a high-level/high profile event for the purpose, inter alia, of raising ministerial awareness of turtle conservation and IOSEA's role. Such an event might be linked, for example, to the establishment of a national committee	Each Signatory State	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	4	Political Profile
58. Explore options to formalize inter-sessional decision-making (e.g. a form of a permanent standing committee) and/or develop a clear procedure agreed upon by all SS	Meeting of Signatory States / Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	none	Procedural
59. Organize sub-regional working groups more effectively during Signatory State meetings, by engaging 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, to provide continuity, and be knowledgeable/experienced in key IOSEA matters).	Sub-regional Focal Points Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	5.3	Procedural

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
60. 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	Inter-sessional Working Group, with involvement of the Advisory Committee	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6	Procedural
61. Focal Points and Advisory Committee should provide advice on core issues to be addressed at Signatory States meetings. (This could be facilitated by earlier circulation of the implementation synthesis.)	Focal Points (including Sub-regional Focal Points) Advisory Committee / Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6; 6.2	Procedural
62. 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	Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	3; 3.4	Public Outreach
63. Guided by Focal Points, direct IOSEA information to national NGOs and indigenous communities to take advantage of their extensive networks for information dissemination	Secretariat, Focal Points	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	4	Public Outreach
64. Disseminate IOSEA outputs (e.g. e-newsletter, publications) to a wider audience, with Focal Point assistance 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)	Secretariat and Focal Points NB: Focal Points should be proactive in forwarding material received from the Secretariat to their national constituencies	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	5	Public Outreach

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
65. Approach the following priority countries with a view to securing IOSEA membership: China, Japan, Malaysia, Republic of Korea, Timor-Leste	Secretariat and Signatory States (to commit to making bilateral approaches)	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6; 6.1	Recruitment of New Signatory States
66. In relation to those countries 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	Signatory States to make bilateral approaches; Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	6; 6.1	Recruitment of New Signatory States
67. Improve species, habitat and threat-related data to enhance regular assessment and reporting of gaps and trends, taking full advantage of the existing IOSEA reporting system/database	Signatory States	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	3; 1	Reporting
68. Encourage integration, in National Reports, of positive substantive contributions from NGO/IGO partners	Signatory States	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	4; 4.3	Reporting
69. Encourage Signatory States to report more effectively on outcomes/impacts (and not only activities conducted)	Secretariat; Meetings of Signatory States	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	5.3; 0	Reporting
70. Institutionalize a process for acknowledging progress in the preparation of national reports at each meeting of the Signatory States	Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	5; 5.3	Reporting

Recommendation	Lead/ responsible	Source	CMP¹	Subject
71. Complete development and implementation of an effective network / list of sites of importance for marine turtles	Signatory States, Advisory Committee, Secretariat	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	2	Site Network
72. Conduct training and offer management advice at Network sites, through Advisory Committee mentorship.	Advisory Committee	MOS7 Action Points	2; 5; 5.4	Site Network
73. Revise the site network application template (and/or instructions) to be more specific so that all relevant data are captured in the initial application to reduce the need for lengthy revisions	Secretariat, Advisory Committee	MOS7 Action Points	2; 5	Site Network
74. Improve understanding of the biological structure of Leatherback Turtle populations: a) Quantify key demographic parameters (reproductive output, clutches per season, remigration interval and annual survivorship) b) Complete mapping of the breeding distribution and census particularly in Sri Lanka, southern Indonesia to north-western Australia and Philippines. c) Conduct satellite telemetry studies to determine migration pathways d) Collect data on hatchling production including sex ratios and health and survivorship of hatchlings (particularly in South Africa, Mozambique, India, Sri Lanka, Indonesia and Papua New Guinea and Thailand)	Signatory States with nesting Leatherback Turtles	Recommendations for Leatherback Turtle conservation, MT-IOSEA/SS.7/Doc. 9	3	Species: Leatherback
75. Investigate the impact of dune stabilization, e.g. through the use of Casuarina trees, through a post graduate research project with expert advice/support (see Provisional List of Project Concepts Resulting from the Updated (2012) Leatherback Assessment).	Not Specified	Provisional List of Project Concepts Resulting from the Updated (2012) Leatherback Assessment	2.1	Species: Leatherback
76. 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)	Not Specified	Provisional List of Project Concepts Resulting from the Updated (2012) Leatherback Assessment	1.1	Species: Leatherback

Recommendation	Lead/ responsible	Source	CMP ¹	Subject
77. Assess hatchery management practices in IOSEA, compile a training publication with best practices and organize a workshop to disseminate this information (see Provisional List of Project Concepts Resulting from the Updated (2012) Leatherback Assessment)	Not Specified	Provisional List of Project Concepts Resulting from the Updated (2012) Leatherback Assessment	3.3	Species: Leatherback
78. 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)	Not Specified	Provisional List of Project Concepts Resulting from the Updated (2012) Leatherback Assessment	1.1	Species: Leatherback
79. Determine the current conservation status of Loggerhead Turtles in in NWIO by analysing existing data	Oman (Ministry of Environment and Climate Affairs, cooperating organizations)	Recommendations for Loggerhead turtle conservation, MT-IOSEA/SS.7/Doc. 9	3; 3.1	Species: Loggerhead
80. Improve understanding of the biological structure of Loggerhead Turtle populations: a) Growth rates, survivorship, recruitment, and habitat use of foraging turtles b) Identify dispersal mechanisms and routes for Loggerhead hatchlings, and migration routes for each of the Indian Ocean management units (strategies could include combinations of active tracking, development of oceanographic models and genetic studies)	For foraging turtles: Priority areas: Western Indian Ocean nations, nations of the North-west Indian Ocean and Western Australia; nesting Loggerhead Turtles (e.g. South Africa, Oman, Western Australia).	Recommendations for Loggerhead turtle conservation, MT-IOSEA/SS.7/Doc. 9	3	Species: Loggerhead

Recommendation	Lead/ responsible	Source	CMP¹	Subject
81. 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 Assessment (2013))	Not Specified	Provisional List of Project Concepts Resulting from the Loggerhead Assessment (2013), MOS 7 Report	3.1	Species: Loggerhead
82. 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))	Not Specified	Provisional List of Project Concepts Resulting from the Loggerhead Assessment (2013)	1.1	Species: Loggerhead
83. Assess vulnerability of Loggerhead nesting beaches to climate change in the IOSEA region, using beach height data, temperature profiles and distribution maps (see Provisional List of Project Concepts Resulting from the Loggerhead Assessment (2013))	Each nation with nesting Loggerhead Turtles to collect baseline data as a contribution to broader modelling exercises	Provisional List of Project Concepts Resulting from the Loggerhead Assessment (2013)	1.1	Species: Loggerhead
84. Enhance appreciation / recognition of NGO/IGO partners (e.g. through acknowledgement in National Reports and by giving recognition to best practices at national level)	Signatory States	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	4; 4.3	Stakeholder Engagement
85. Encourage more sub-regional interactions (e.g. by organizing intersessional sub-regional meetings, training, task forces, etc.)	Signatory States, Sub-regional Focal Points	Report of the IOSEA Strategic Planning Meeting (2009); IOSEA-Level Challenges and Selected Actions to Address Them	5	Sub-regional Coordination

Recommendation	Lead/ responsible	Source	CMP¹	Subject
86. Establish coordinated regional approaches to illegal fishing and bycatch management	States of the IOSEA Region, International fisheries management agencies	Recommendations for Leatherback and Loggerhead Turtle conservation, MT-IOSEA/SS.7/Doc. 9	5	Sub-regional Coordination; Fisheries Interactions
87. Consider conducting training about IOSEA online tools and national report completion via webinars	Secretariat, Signatory States, Advisory Committee	MOS7 Action Points	5; 5.3	Website and Online Tools

Part II: Socio-Economic and Cultural Implications of Marine Turtle Use and Conservation (Source: MOS7/Doc. 10.3 [Socio-Economic and Cultural Implications of Marine Turtle Use and Conservation](#))

Identified Gaps

Published research

1. Most studies focused on the impacts of human activities on marine turtles, principally fishing, closely followed by unsustainable use, while the impacts of coastal development and human presence on beaches seem to have been poorly evaluated in the IOSEA region.
2. There is a need to develop social mapping programmes to better understand the human components of marine turtle use and conservation, such as legends, culture and history associated with sea turtles, in order to strengthen the community's support of conservation activities and to improve their efficacy.

Outreach

3. Existing approaches currently focus on lectures, production and dissemination of brochures, posters and videos etc. These can be much more varied and the use of the internet and social media can also be effective tools for reaching the young. For all methods used more consideration should be given to recording lessons learned and evaluating efficacy and impact.

Alternative livelihood development

4. There is scope for expansion of ecotourism as a sustainable, non-consumptive use of marine turtles that allows for both positive conservation outcomes and community development, subject to stringent protocols that give priority to environmental protection and assure that revenues are equitably distributed to the custodians of the resource. Particular attention needs to be paid to financial sustainability of alternative livelihood projects.

Importance of stakeholder involvement

5. Involvement of local stakeholders in all aspects of resource management and research – including habitat monitoring, data collection and disposal of marine debris – has the potential to have far-reaching benefits in terms of community engagement and assuming responsibility for the resource.
6. Particularly, expanding activities to involve fishermen in sea turtle research would both provide valuable data and raise fishermen's awareness of turtles. Furthermore, there is a need to enhance information sharing on community involvement in managing turtle habitat and conserving turtles to enable replication of successful approaches throughout the region. This process of knowledge / experience transfer would benefit from standardized documentation of methodology, as well as objective evaluation of successes and failures, implementation challenges and lessons learned.

Part III: Priorities arising from the analysis of national reports for MOS7 (Source: MOS7/Doc.06 [Part II: Detailed analysis of national reports, excluding site-based information](#))

1. About three-quarters of the Signatory States identified the conservation and management activities that they consider to be among the highest priorities for action.
2. The nine highest priorities are: (1) conducting targeted studies on marine turtles and their habitats; (2) establishing habitat protection and conservation measures; (3) establishing or strengthening education and information programmes; (4) capacity-building, training and partnerships; (5) reducing incidental capture and mortality; (6) identifying and documenting threats; (7) enhancing public participation; (8) enhancing cooperation, information exchange mechanisms and (9) developing nesting beach management programmes.
3. Signatories also identified the following issues as those for which international cooperation was essential as follows.
 - **Higher importance:** cooperative research in several areas (e.g. identification of migration routes, habitat and genetics studies, tagging/satellite tracking and identification of turtle populations); illegal fishing in territorial waters; training/capacity building, enforcement/patrolling of territorial waters, oil spills, pollution and marine debris
 - **Less important:** development of gear technology, poaching/illegal trade in turtle products, hunting/harvest by neighbouring countries, alternative livelihood development.