



Indian Ocean – South-East Asian Marine Turtle
Memorandum of Understanding

Report of the Seventh Meeting of IOSEA Signatory States

Bonn, Germany,
8-11 September 2014

Table of Contents

EXECUTIVE SUMMARY	vi
GLOSSARY	xi
AGENDA ITEM 1: WELCOMING REMARKS.....	1
AGENDA ITEM 2: SIGNATURE OF THE MEMORANDUM OF UNDERSTANDING BY ADDITIONAL STATES	1
AGENDA ITEM 3: ELECTION OF OFFICERS	2
AGENDA ITEM 4: ADOPTION OF THE AGENDA AND SCHEDULE	2
AGENDA ITEM 5: OPENING STATEMENTS	2
AGENDA ITEM 6: REPORTS OF THE SECRETARIAT AND ADVISORY COMMITTEE	2
(a) Report of the Secretariat	2
(b) Report of the Advisory Committee Chair	4
AGENDA ITEM 7: REVIEW OF IMPLEMENTATION PROGRESS OF THE MEMORANDUM OF UNDERSTANDING	4
(a) Synthesis of national reports – Overview of MoU implementation to date ..	4
(b) Recommendations arising from species assessments.....	6
(c) National networks/committees	7
(d) Sub-regional groups and related coordination mechanisms	8
(e) Current use and further development of online implementation tools	8
AGENDA ITEM 8: MAJOR THEMATIC ISSUES	8
(a) Network of sites of importance for marine turtles and their habitats	8
(b) Further development of the technical support/capacity-building programme	13
(c) Reviews/analyses arising from the Sixth Meeting of Signatory States	14
(i) Illegal Take and Trade of Marine Turtles	14
(ii) Marine Turtle Genetics Stocks of the Indo-Pacific	16
(iii) Socio-Economic and Cultural Implications of Marine Turtle Use and Conservation	16
(iv) Insights into Indian Ocean Fisheries – Turtle Interactions	18

(d) Other matters (thematic workshops)	19
(i) Workshop I: Artificial pollution and marine turtles.....	19
(ii) Workshop II: Stakeholder engagement through the Community Voice Method.....	20
AGENDA ITEM 9: INSTITUTIONAL MATTERS	21
(a) IOSEA Focal Point roles and responsibilities.....	21
(b) Advisory Committee membership and tasks	22
(c) Collaboration with other organisations (e.g. IGOs, NGOs, private sector) 23	
(d) Forthcoming meetings and events of relevance to IOSEA	23
(e) Next Meeting of the Signatory States	23
AGENDA ITEM 10: FINANCIAL AND ADMINISTRATIVE MATTERS.....	23
(a) Review of expenditures and status of voluntary contributions.....	23
(b) Work programme and indicative budget for 2015-2017	24
(c) Proposed Secretariat arrangements during special leave of absence of Co- ordinator	25
(d) Additional sources of funding and support for coordination and implementation	26
AGENDA ITEM 11: ANY OTHER BUSINESS.....	26
AGENDA ITEM 12: CLOSURE OF THE MEETING.....	26

ANNEXES

ANNEX 1: LIST OF PARTICIPANTS	27
ANNEX 2: AGENDA	33
ANNEX 3: STATEMENTS OF SIGNATORY STATES.....	34
ANNEX 4A: OUTLINE FOR THE SUB-REGIONAL CONSULTATIONS	36
ANNEX 4B: SUMMARY OF THE WESTERN INDIAN OCEAN (WIO) WORKING GROUP DISCUSSIONS	38
ANNEX 4C: SUMMARY OF THE NORTHERN INDIAN OCEAN (NIO) WORKING GROUP DISCUSSIONS	47
ANNEX 4D: SUMMARY OF THE NORTHWEST INDIAN OCEAN (NWIO) WORKING GROUP DISCUSSIONS	58
ANNEX 4E: SUMMARY OF THE SOUTH-EAST ASIA (SEA+) WORKING GROUP DISCUSSIONS	65
ANNEX 5: REPORT OF SIXTH MEETING OF THE WESTERN INDIAN OCEAN – MARINE TURTLE TASK FORCE (WIO-MTF).....	74
ANNEX 6: IOSEA BUDGET FOR 2015-2017 AND INDICATIVE SCALE OF VOLUNTARY CONTRIBUTIONS	83
ANNEX 7: REPORT OF THE SEVENTH MEETING OF THE IOSEA ADVISORY COMMITTEE	86
ANNEX 8: ACTION POINTS ARISING FROM THE SEVENTH MEETING OF SIGNATORY STATES	119

Executive Summary

The Seventh Meeting of the Signatory States to the Indian Ocean – South-East Asian Marine Turtle Memorandum of Understanding (IOSEA SS7) was held in Bonn, Germany, from 8-11 September 2014. The meeting was chaired by Ms. Alexis Gutierrez, the United States' Focal Point for IOSEA. It was preceded by a three-day session of the IOSEA Advisory Committee and a one-day session of the Western Indian Ocean - Marine Turtle Task Force (WIO-MTTF).

Twenty-three Signatory States were officially represented at SS7, along with six of the eight Advisory Committee members, as well as invited experts and observers from various intergovernmental and non-governmental organisations. The meeting had been scheduled for July 2014, but the political situation in Thailand in the first half of the year prompted its postponement and relocation to Bonn, home of the Convention on Migratory Species (CMS) under whose aegis IOSEA was concluded in 2001. At the start of the meeting, Mr. Bradnee Chambers, CMS Executive Secretary, described IOSEA as one of the Convention's most successful regional instruments.

Since the last meeting of Signatory States, Sudan and Egypt had signed the MoU, bringing the IOSEA membership to 35 countries. There were only a few countries with significant coastlines that had yet to join, notably Somalia and three nations with important fishing interests in the Indian Ocean: China, Japan and Republic of Korea.

The meeting included many issues of regional and global significance for marine turtle conservation. Besides reviewing implementation of the IOSEA Conservation and Management Plan, the meeting considered substantial papers on four themes identified as priorities by the Signatory States when they last met in Bangkok in January 2012: (1) Illegal Take and Trade of Marine Turtles in the IOSEA Region; (2) Marine Turtle Genetic Stocks of the Indo-Pacific; (3) Socio-economic and Cultural Implications of Marine Turtle Use and Conservation; and (4) Indian Ocean Fisheries-Turtle Interactions. A fifth major topic was a review of IOSEA's Technical Support / Capacity-Building Programme, including recommendations for its future direction, led by the IOSEA Advisory Committee. Most of the priority topics discussed by Signatory States had been deliberated by the Advisory Committee during its earlier session.

A highlight of the gathering was the [launch of the IOSEA Network of Sites of Importance for Marine Turtles](#), culminating many years of intensive developmental work. The network is intended to enhance the local-to-global scale recognition of the importance of selected sites, while offering conservation benefits that are most readily achieved through a well-coordinated mechanism. It will optimise use of limited resources and will help to diffuse adverse socio-economic impacts over a wider geographic scale, while promoting ecological connectivity as well as resistance and resilience to environmental stress.

Proposals for the inclusion of ten network sites had been officially submitted by nine countries spread across the Indian Ocean. The Advisory Committee carefully reviewed each of the proposals, using the agreed Evaluation Criteria, to determine whether or not the individual proposals attained a minimum benchmark score. Committee members worked with proponents in the margins of the meeting to address issues in the proposals that had been submitted. The meeting agreed a modified decision framework with which to consider the Advisory Committee's recommendations. Ultimately, all of the 10 candidate sites were accepted for inclusion in the Network. The contents of four of the site proposals were deemed suitable for publication on the IOSEA website, namely: [Europa Island](#) (France), [Aldabra Atoll](#) (Seychelles), [iSimangaliso Wetland Park World Heritage Site](#) (South Africa), and [Rufiji – Mafia Seascape](#) (United Republic of Tanzania). The other six sites also met the criteria for inclusion in the Network but the meeting decided that their contents would be published on the IOSEA website only after certain amendments to their supporting documentation had been effected. The sites in question are: [Itsamia, Moheli](#) (Comoros), [Thameehla Island](#) (Myanmar), [Shidvar Island](#) (Islamic Republic of Iran), Turtle Islands Wildlife Sanctuary (Philippines), and [Bu Tinah Shoal](#) and [Sir Bu Na'air Island](#) (United Arab Emirates). It was agreed that the amendments should be made

within six months of the conclusion of IOSEA SS7, with mentorship from the Advisory Committee. The meeting emphasised the importance of timely submission of future Site Network proposals. Seven countries – namely Australia, Mauritius, Oman, Seychelles, Thailand, the United Kingdom and the United States – and Advisory Committee member Ronel Nel, volunteered to form a working group tasked with revisiting the Site Network Information Sheet template in the months following the meeting.

It was recognised that the main needs for operationalising the Site Network were funding and capacity-building. Representatives of Australia and the United States, Lindsey West (Sea Sense, Invited Expert), and Marina Antonopoulou (EWS-WWF) volunteered to form the initial core of a steering committee tasked with securing long-term financial support for site-based activities in the months following the meeting. The Coordinator also offered to provide input during his sabbatical.

The Secretariat presented its customary [overview of IOSEA implementation progress](#), based on an analysis of the national reports submitted by Signatory States. About half of the Signatories had made substantial progress towards fulfilling their reporting requirements, a quarter of them had made some progress; and the remainder had not updated their reports for some years or, in a few cases, had not reported at all. A colour-coded performance matrix showed how much progress each Signatory was making and how well the MoU was doing collectively for each of the 24 programmes of work under the IOSEA Conservation and Management Plan. Australia, France and South Africa appeared to be performing best, followed by a group of eight other Signatories. Of the four sub-regions, the Western Indian Ocean had distinguished itself, followed by the Northern Indian Ocean and South-East Asia⁺. The Northwest Indian Ocean continued to trail by a considerable margin, in part due to non-reporting by several countries. Overall, there were positive trends for implementation across 14 of the 24 programmes and in 25 of the 33 Signatories reporting, notably the United Arab Emirates, United Republic of Tanzania, Madagascar, Malaysia and Pakistan.

Generally, the reports provided a good overview of marine turtle populations and good examples of conservation work and challenges being faced. The Secretariat noted that improvements could be made by including more information on fisheries by-catch and related mitigation measures, as well as details of conservation of critical habitats outside protected areas, and by including more specific descriptions of resource needs and mobilisation of domestic resources. IOSEA would also benefit from a more equitable sharing of operational costs. The Secretariat's analysis highlighted several other specific areas in which Signatory State reporting or implementation could be improved.

The [review of complementary site-based information](#) contained in the national reports revealed by-catch in coastal fisheries to be the greatest threat to marine turtles, followed by natural predation, and excessive egg collection. Specific actions were identified for Signatory States to undertake in order to improve the quality and coverage of their site-specific data.

The Secretariat introduced the main features of the [IOSEA website](#), including the dynamic news page, various technical databases and useful online resources. Attention was drawn to the new [International Flipper Tag Recovery database](#), having an initial emphasis on the Western Indian Ocean; and delegates were invited to register and provide data and feedback. It was suggested that further training on the use of IOSEA online tools and completion of national reports could be conducted through webinars.

Four substantive papers arising from requests of the Sixth Meeting of IOSEA Signatory States were presented. A paper prepared by the Secretariat on '[Illegal Take and Trade of Marine Turtles in the IOSEA Region](#)' highlighted the prevalence of poaching in South-East Asia involving Chinese and Vietnamese fishermen, particularly in the Coral Triangle area, to supply markets in mainland China, Taiwan and Japan. Bali remained a hotspot for trade in live green turtles; while Kalimantan, Indonesia, was identified as an important source of eggs to supply Malaysia, particularly the state of Terengganu. Possible solutions to diminish the trade at local levels were drawn from experiences around the IOSEA region. These varied depending on the nature of the drivers for turtle trade.

Potential synergies were identified between IOSEA and various other organisations, including the International Consortium on Combating Wildlife Crime, INTERPOL, ASEAN, CITES and TRAFFIC. The Secretariat was requested to increase the visibility of illegal take and trade issues on the IOSEA website; and to update its paper with a view to making a joint intervention (with the Secretariat of the Inter-American Convention for the Protection and Conservation of Sea Turtles) to the CITES COP17 (South Africa, 2016). The meeting also convened to establish a working group to address issues related to turtle trade.

A second paper on '[Marine Turtle Genetic Stocks of the Indo-Pacific](#)', co-authored by Dr. Colin Limpus, presented the current state of knowledge about marine turtle stocks in the IOSEA region. It emphasised that the retention of small populations was also important for maintenance of biodiversity. Signatory States requested the Advisory Committee and the Secretariat to assist them to identify needs and opportunities for regional analyses to inform stock assessment across the species' entire range. On request, the Advisory Committee would provide guidance on collection protocols and facilitate contacts with laboratories. Signatories were encouraged to incorporate genetic sampling into their ongoing monitoring activities, and to submit haplotype information to genetic banks and share sequenced data. The meeting also identified a need to complete ongoing genetics work on green, loggerhead and hawksbill turtles.

A third paper on '[Socio-economic and Cultural Implications of Marine Turtle Use and Conservation](#)' covered a multitude of topics with a social, economic or cultural dimension. These included the promotion of alternative livelihoods for marine turtle users and the role of education in marine turtle conservation. Examples from around the region emphasised the importance of understanding the human element in order to develop a more multidisciplinary approach for conservation. The WIO-MTTF proposed to hold a series of workshops in the Western Indian Ocean to examine more closely the relevant socio-economic and cultural factors. The Secretariat pointed out that IOSEA would benefit if the lessons-learned could be shared more widely and if successful programmes conducted in one country could be emulated elsewhere in the region.

A fourth paper on '[Indian Ocean Fisheries-Turtle Interactions](#)' illustrated the potential contribution of Indian Ocean Tuna Commission (IOTC) national reports towards understanding of marine turtle bycatch issues in the Indian Ocean, including the efficacy of by-catch mitigation measures undertaken by IOTC members. IOSEA Signatory States were encouraged to initiate or continue dialogue about IOSEA issues among countries that are also IOTC members, and to intervene as appropriate in relevant fora. Concerns about gill nets, fish aggregating devices (FADs) and other fisheries-related sources of turtle mortality were to be addressed to the IOTC Working Party on Ecosystems and By-catch (WPEB). The Secretariat was requested to assess current RFMO resolutions and active conservation management measures, including data collection requirements; and to keep Signatory States informed about developments in relation to sub-regional by-catch assessment projects. The United States (NOAA) offered to investigate the possibility of collaborating with IOTC/IOSEA in the delivery of technical support such as marine turtle-related observer training, and Oman offered to share methods and lessons learned from current studies on fisheries interactions

Advisory Committee member Dr. Jeff Miller [presented an in-depth review](#) of the history, methods and challenges faced in the development of the IOSEA Technical Support / Capacity-building Programme, the ultimate objective of which was to ensure that all Signatories are self-sufficient. He pointed out a number of issues with the IOSEA national report format. In their sub-regional discussions, Signatory States requested the Advisory Committee to respond to specific requests for capacity-building support, including those from United Republic of Tanzania and Madagascar; to work with Signatories to assess and advise on hatchery management practices (e.g. in the Maldives, Sri Lanka, Indonesia and the Philippines); and to identify potential opportunities for sub-regional capacity building/technical workshops, in particular in the NWIO and NIO regions.

The meeting reconsidered the comprehensive assessments of leatherback and loggerhead turtles that had been updated or completed in 2012 and 2013, respectively. Both documents had identified gaps in biology or management that needed to be addressed and included specific suggestions and recommendations. The Advisory Committee had reviewed and developed further the project concepts arising from the updated 2012 Leatherback Assessment. Areas upon which to focus included improving leatherback hatching success in Mozambique, devising a low-cost monitoring protocol for Sri Lanka, and examining egg relocation and hatchery practices in Malaysia and Thailand. Data were scarce for nesting sites in Java and Sumatra and this might be addressed at low cost by mobilising local communities. Three further projects were identified for possible follow-up in relation to loggerhead turtles: (1) examination of hatchling production, dispersal and survival rates; (2) analysis of existing data from Oman, Yemen (Socotra), and Sri Lanka; and (3) assessment of the species' vulnerability to climate change, including changing sex ratios.

Two workshops incorporated into the conference programme provided much food for thought. The first one, addressing the pervasive problem of artificial light pollution, included three technical presentations: an [overview on Artificial Light at Night \(ALAN\) assessment, measurement and management](#) (Dr. Kellie Pendoley); a review of recent studies suggesting that darkness is the best lighting management option at nesting beaches (Dr. Colin Limpus); and consideration of the human dimensions of light pollution management (Dr. Mark Hamann). The second workshop, conducted by Dr. Peter Richardson, focussed on 'Stakeholder Engagement through the Community Voice Method', which had included the production of a documentary-style film based on stakeholder interviews. His presentation offered insights into this innovative approach used in the Caribbean to involve stakeholders in the decision-making process.

The meeting was further enlightened by two additional expert presentations concerning: [market forces driving marine turtle trade in China and Japan](#), delivered by Marina Antonopoulou (Emirates Wildlife Society); and projects in the IOSEA region funded by the [United States Marine Turtle Conservation Act of 2004](#), presented by Mr. Earl Possardt (USFWS).

Turning to administrative matters, the Secretariat drew attention to the '[Terms of Reference and Guidance for IOSEA Focal Points](#)' which clarified the general roles and responsibilities of IOSEA national and sub-regional Focal Points and offered guidance to assist Focal Points in their intersessional work. The IOSEA sub-regional Focal Points were appointed as follows: Thailand (for South-East Asia⁺); Maldives (for Northern Indian Ocean); Oman (for Northwest Indian Ocean); and Kenya (for Western Indian Ocean).

The IOSEA Advisory Committee was reconstituted with the addition of three new members, Mr. Robert Baldwin, Mr. Jérôme Bourjea and Dr. Ronel Nel; and the re-nomination of four existing members, Drs. Jack Frazier, Jeffrey Miller, Colin Limpus and Mark Hamann, who will continue to serve alongside Dr. Manjula Tiwari. The further development of technical support to Signatory States, in particular regarding hatchery management practices and the conduct of Environmental Impact Assessments; guidance in relation to the IOSEA Site Network; and revision of the [Site Network Evaluation Criteria](#) and [Site Information Sheet template](#) were among the tasks assigned to the Advisory Committee. It was further agreed that a hawksbill species assessment would be drafted by the Committee inter-sessionally and presented at the Eighth Meeting of Signatories in 2017.

The meeting learned of the exemplary efforts of Kenya, Mauritius, Oman, Seychelles and the United Republic of Tanzania to establish national committees to promote inter-agency cooperation in relation to marine turtle conservation issues. Further details of these and other initiatives, obtained through a questionnaire administered periodically by the Secretariat, can be found in a [dedicated section of the IOSEA website](#). Representatives of Thailand and the United Arab Emirates each offered to consider hosting and organising an intersessional sub-regional meeting with a view to promoting cooperation within their respective constituencies.

The Secretariat presented a report on IOSEA's financial situation and took the opportunity to acknowledge the continuing voluntary contributions from Australia, France, India, Maldives, Mauritius, Mozambique, Oman, South Africa, Thailand, United Kingdom, United Republic of Tanzania and United States, as well as facilities and services provided by the UNEP Regional Office for Asia and the Pacific, in Bangkok. The meeting endorsed the proposed budget for 2015-2017, averaging US\$315,000 per annum, together with an indicative scale of contributions, with the understanding that all financial support remained voluntary and that fulfilment of the programme budget lines depended on the level of contributions received. The meeting raised the minimum indicative voluntary contribution from US\$500 to US\$750 per annum and agreed that the next Meeting of IOSEA Signatory States be held in the first half of 2017.

The proposed arrangements for the IOSEA Secretariat during the special leave of the Co-ordinator, beginning in October 2014, were discussed. During Mr. Hykle's absence the Secretariat would temporarily relocate to Bonn, where Ms. Clara Nobbe (UNEP/DELCO) would replace him for one year. The CMS Executive Secretary assured Signatories that the 85/15 percent split of the interim Coordinator's time between IOSEA- and CMS-related work would be maintained and that IOSEA would also benefit from greater attention from and synergies with the parent CMS Secretariat.

Apart from the formal discussions that took place within the meeting proper, there were many opportunities for delegates to share information and experiences informally. While these exchanges do not appear in the report of the meeting, they have immense value in increasing knowledge and creating bonds between countries.

Douglas Hykle
IOSEA MoU Coordinator / Senior CMS Advisor
Bangkok, October 2014

Glossary

Abbreviation	Meaning
AC	Advisory Committee (IOSEA)
ACAP	Albatross and Petrel Agreement
ADSEI	Association pour le Développement Socio-Economique d'Itsamia (Association for the Social-Economic Development of Itsamia, Comoros)
ALAN	Artificial Light at Night
ASEAN	Association of Southeast Asian Nations
ASEAN-WEN	ASEAN Wildlife Enforcement Network
BFAR	Bureau of Fisheries and Aquatic Resources (Philippines)
BfN	Bundesamt für Naturschutz (Federal Nature Conservation Agency, Germany)
BIOT	British Indian Ocean Territory
BOBLME	Bay of Bengal Large Marine Ecosystem
CBD	Convention on Biological Diversity
CCBST	Commission for the Conservation of Southern Bluefin Tuna
CITES	Convention on International Trade in Endangered Species of Wild Flora and Fauna
CMP	Conservation and Management Plan (IOSEA)
CMS	Convention on the Conservation of Migratory Species of Wild Animals
COCA LOCA	Connectivity of Loggerhead turtle (<i>Caretta caretta</i>) in Western Indian Ocean: Implementation of LOCAL and regional management
COP	Conference of the Parties
DENR	Department of Environment and Natural Resources (Philippines)
EAD	Environment Agency – Abu Dhabi (United Arab Emirates)
EAWS	East Africa Wildlife Society
EBSA	Ecologically or Biologically Significant Areas
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EPBC	Environment Protection and Biodiversity Conservation Act 1999 (Australia)
EWS-WWF	Emirates Wildlife Society – World Wide Fund for Nature (NGO consortium)
FAD	Fish Aggregating Device
FAO	Food and Agriculture Organization
GBRMP[A]	Great Barrier Reef Marine Park [Authority] (Australia)

Abbreviation	Meaning
GEF	Global Environment Facility
ICZM	Integrated Coastal Zone Management
IFREMER	Institut Français de Recherche pour l'Exploitation de la MER (oceanographic institution, France)
IGO	Inter-Governmental Organisation
IOSEA	Indian Ocean – South-East Asian Marine Turtle MoU
IOTC	Indian Ocean Tuna Commission
IAC	Inter-American Sea Turtle Convention
ISTS	International Sea Turtle Society
IUCN	International Union for Conservation of Nature
KESCOM	KEnya Sea turtle Conservation COMmittee
KMFRI	Kenya Marine Fisheries Research Institute
KWS	Kenya Wildlife Service
LED	Light-Emitting Diode
LNG	Liquefied Natural Gas
MCS	Marine Conservation Society (United Kingdom)
MEA	Multilateral Environmental Agreement
MECA	Ministry of Environment and Climate Affairs (Oman)
MoU	Memorandum of Understanding
MPA	Marine Protected Area
MRC	Marine Research Centre (Maldives)
NGO	Non-Governmental Organisation
NIO	Northern Indian Ocean
NRSMPA	National Representative System of Marine Protected Areas (Australia)
NSF	Naval Support Facility (United States)
NOAA	National Oceanic and Atmospheric Administration (United States)
NWIO	Northwest Indian Ocean
PERSGA	Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden
RFMO	Regional Fisheries Management Organisation
ROAP	Regional Office for Asia-Pacific (UNEP office in Bangkok, Thailand)
ROPME	Regional Organization for the Protection of the Marine Environment

Abbreviation	Meaning
SAARC	South Asian Association for Regional Cooperation
SACEP	South Asia Co-operative Environment Programme
SAWEN	South Asian Wildlife Enforcement Network
SEA+	Southeast Asia +
SEAFDEC	Southeast Asian Fisheries Development Center
SRCWPP	Strengthening Regional Cooperation for Wildlife Protection Project (Bangladesh)
SWIOFP	Southwest Indian Ocean Fisheries Project
TED	Turtle Excluder Device
TUMRA	Traditional Use of Marine Resources Agreement (Australia)
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
USFWS	United States Fish and Wildlife Service
WCCU	Wildlife Crime Control Unit (Bangladesh)
WCPFC	Western and Central Pacific Fisheries Commission
WCS	Wildlife Conservation Society
WIO	Western Indian Ocean
WIOMSA	Western Indian Ocean Marine Science Association
WIO-MTTF	Western Indian Ocean – Marine Turtle Task Force
WPEB	Working Party on Ecosystems and Bycatch (of the IOTC)
WWF	World Wide Fund for Nature

Agenda item 1: Welcoming remarks

1. Mr Bradnee Chambers, Executive Secretary of the Convention on Migratory Species (CMS), opened the meeting and welcomed participants to Bonn, Germany, the seat of the CMS Secretariat. He described IOSEA as one of the Convention's most successful regional instruments. Most of these instruments were administered from Bonn, but IOSEA was one of the exceptions, having its own staff based in Bangkok, Thailand. He noted that the meeting faced a heavy agenda which included many issues of regional and global significance including illegal trade, socioeconomic aspects of marine turtle conservation, and the establishment of a site network.

2. A meeting of the CMS Conference of the Parties would take place in two months' time, with an exciting agenda that included proposals to list several iconic species in the CMS Appendices. As well as considering a resolution on transboundary wildlife crime, the conference would also address important institutional issues. The structure of the Convention, with its seven Agreements and nineteen MOUs, would be re-examined to see how its coherence and efficiency could be enhanced. There was considerable scope for collaboration and synergies on issues such as fund-raising and outreach, and for reducing duplication. Concluding his remarks, Mr Chambers said that he expected a large turn-out at the COP and he urged all those present to attend. He called on those countries that were signatories to IOSEA but not Party to CMS to accede to the parent Convention.

3. Mr Douglas Hykle, IOSEA Coordinator and Senior CMS Adviser, noted that the venue of the meeting, the *Wissenschaftszentrum*, had a long-standing connection to CMS. It had served for several years as the headquarters of the CMS Secretariat, including at the start of his CMS career nearly a quarter century earlier. At that time, the parent Convention had just 35 Parties – coincidentally the same as the current number of IOSEA Signatories.

4. The Coordinator explained that the Secretariat had sought to organise the present meeting in Africa or in the Gulf region, but the negotiations has not been fruitful. When the political situation in Thailand made it impractical to hold the meeting there, the CMS Executive Secretary had suggested holding the meeting in Bonn. Mr Hykle expressed appreciation for the efforts made by the German Foreign Ministry in assisting a number of delegates to secure their visas, noting that it was important for delegates requiring a visa to apply in good time.

5. In addition to the present Meeting of Signatories, meetings of the IOSEA Advisory Committee and the Western Indian Ocean – Marine Turtle Task Force had already taken place. Other sub-regions might consider convening similar meetings in the future taking advantage of the collective presence of their respective members. The Coordinator called upon Signatory States to follow the examples of Oman and Indonesia, and offer to host a future Meeting of the Signatories in order to alleviate some of the administrative and financial burden of the small Secretariat.

6. To conclude the opening session, a *tour de table* was conducted to allow all delegates, observers and staff members to introduce themselves. The delegate from South Africa clarified that, in the absence of formal authorisation, she would be attending the meeting as an observer. The full list of meeting participants appears in Annex 1.

Agenda item 2: Signature of the Memorandum of Understanding by additional States

7. The Coordinator reported that no further Range States had indicated their intention to sign the MoU during the course of the meeting.

Agenda item 3: Election of officers

8. The Coordinator sought nominations from the floor for the posts of Chair and Vice-Chair of the meeting. Oman, seconded by the United Kingdom, nominated the United States as Chair. Mauritius, seconded by the Maldives, nominated Oman as Vice-Chair. Both nominees expressed their willingness to serve. Accordingly, Ms Alexis Gutierrez (United States) assumed the Chair, thanking the meeting for the confidence expressed in her.

Agenda item 4: Adoption of the agenda and schedule

9. The Chair introduced the agenda and the schedule and invited comments from the floor; there were none. One change was proposed due to the fact that one of the workshop convenors had had to cancel his attendance at short notice. The workshop that he was supposed to lead would be shortened, allowing more time for sub-regional group meetings. Subject to this amendment, the agenda and schedule were adopted as presented. Annex 2 contains a copy of the agenda.

Agenda item 5: Opening statements

10. The statements made by Mauritius and the United Kingdom are reproduced verbatim in Annex 3.

Agenda item 6: Reports of the Secretariat and Advisory Committee

(a) Report of the Secretariat

11. The Coordinator introduced document MT-IOSEA/SS.7/Doc.5, which covered activities since the Sixth Meeting of Signatories (IOSEA SS6, Bangkok, January 2012). Since that time two more countries had signed the IOSEA MoU: Sudan, which was represented at the meeting, and Egypt, which was not. The geographic extent of the MoU now covered most of the Indian Ocean. Only a small number of States with a significant coastline had yet to join – the main ones being Somalia and three nations with significant fishing interests in the Indian Ocean, namely China, Japan and Republic of Korea.

12. Important developments since IOSEA SS6 had included progress towards establishing the IOSEA Marine Turtle Site Network, for which a dedicated page on the IOSEA website had been created and a large number of potential sites had been identified. Various online tools were being developed and made available through the website, including a new database for international flipper tag recoveries. The website also included a satellite tracking meta-database and an extensive bibliography (see also agenda item 7(e) on online tools below).

13. Several technical documents had been published including Dr. Jeff Miller's "[Review of Marine Turtle Conservation in the Northern Indian Ocean](#)", an updated [species assessment for the leatherback turtle](#) compiled by Dr. Ronel Nel, a new [assessment for the loggerhead turtle](#) compiled by Dr. Mark Hamann, and a [revised ecological risk assessment for sea turtles in the Indian Ocean](#) prepared by a team led by Dr Nel. The Secretariat had also published an [analysis](#) it had made of national reports submitted to the Indian Ocean Tuna Commission (IOTC). In February 2014 it also circulated a draft of its substantial [review of socioeconomic and cultural aspects of marine turtle conservation](#).

14. A training workshop and seminar led by Dr. Colin Limpus was organised in Myanmar in March 2012, wrapping up a first phase of the IOSEA Technical Support/Capacity-building Programme. The Secretariat had also contributed to the development of a national action plan for France's southwest Indian Ocean territories.

15. The principal channel for dissemination of information from the Secretariat was the IOSEA website and a monthly electronic news bulletin. Feedback and substantive contributions were requested. The Coordinator drew attention to the fact that the website's underlying code was in need of substantial upgrading in order to make it more secure from hackers. This would be a very time-consuming endeavour. More generally, the IOSEA public information materials would benefit from being refreshed and brought up to date.

16. The Secretariat had cooperated closely with a number of organisations active in the region, most notably the Indian Ocean Tuna Commission (IOTC), the primary regional fisheries management organisation (RFMO). It also cooperated with and offered moral support to the work of various NGOs. The Secretariat had also provided financial support to the Western Indian Ocean – Marine Turtle Task Force, enabling it to hold meetings in Port Elizabeth, South Africa, in December 2012 and in Bonn, Germany, immediately before the current Meeting of Signatories. This Task Force was an effective coalition and a model that other sub-regions might wish to follow.

17. The Secretariat had enjoyed a fruitful relationship with UNEP's Regional Office for Asia and the Pacific for over a decade and had benefitted from considerable in-kind support. The Coordinator dedicated 85 per cent of his time to IOSEA, with the rest being spent on CMS work. The gap created by the departure of the team assistant some 18 months ago had been filled by interns and consultants, including the appointment of Ms Pishum Migraine. More details were contained in the [finance documents](#) (see agenda item 10).

18. The Coordinator confirmed that he would be taking a one-year Special Leave without Pay starting in October 2014, in order to conduct a personal research project. During his absence the Bangkok office would temporarily relocate to Bonn, where it would benefit from the close proximity to the parent secretariat. Ms Clara Nobbe of DELC in UNEP HQ in Nairobi had been appointed to assume his functions on an interim basis. The representative of the United States sought assurances that the 85/15 per cent split of the interim Coordinator's time would be maintained when the Secretariat moved to Bonn. The CMS Executive Secretary assured IOSEA Signatories that the ratio be fully respected, and that IOSEA would also benefit from greater attention from and synergies with the main CMS Secretariat.

19. Dr Frazier, Chair of the Advisory Committee, thanked the Secretariat and particularly Mr Hykle for its work and welcomed Ms Nobbe's appointment. Given that a number of projects were in the process of being developed and implemented, he sought assurances that Mr Hykle would be available to provide advice while on special leave. Mr Hykle gave the assurance that he would remain available for consultation and possibly even *pro bono* missions until his return to the post after one year.

20. The representative of the United States asked whether the Secretariat was actively pursuing the recruitment of China, a fishing nation with considerable impact within the IOSEA region and with which the United States was conducting bilateral talks on issues relating to wildlife trade. The Coordinator said that he had undertaken a mission to Beijing on behalf of CMS in 2013, at which time the Chinese fisheries authority was undergoing a major reorganisation. CMS and IOSEA would continue to seek dialogue with the Chinese fisheries authorities, but they seemed less receptive than the State Forestry Administration, with which CMS had long-standing contacts.

21. The representative of Maldives noted with appreciation the Secretariat's report and activities detailed within it. In the Maldives, a second ten-year moratorium on turtle fishing would end soon, but a recommendation would be made to declare a third phase. Although the lack of resources, both human and financial, was a problem the political will existed to promote turtle conservation and contacts were being fostered with NGOs and international bodies.

(b) Report of the Advisory Committee Chair

22. The Chair of the Advisory Committee delivered his oral report. Dr Frazier introduced those members of the Advisory Committee present at the meeting; two other members (Mr Chokesanguan and Dr Shanker) had been unable to attend. It was noted that the written report of the Meeting of the Advisory Committee held over the three days immediately before the Meeting of Signatories would be circulated as soon as comments on the draft had been processed. The final report of the Advisory Committee meeting, held on 5-7 September, appears in Annex 7.

23. Issues relating to the implementation of the IOSEA MoU that had been discussed included: information drawn from the national reports; an examination of genetic stocks; illegal take and trade; published assessments of leatherback and loggerhead turtles; the proposed workshop on artificial light pollution; fisheries by-catch; and the establishment of the IOSEA Marine Turtle Site Network including the evaluation of nine proposals submitted by Signatory States. With regard to the latter, he noted that candidate sites with a robust scientific justification were needed, in order to encourage sponsors and funding agencies to respond positively.

24. The Committee had examined the IOSEA Conservation and Management Plan, which was a substantial document that required setting of priorities. Dr Jeff Miller presented an in-depth review of the history, methods and challenges faced in the development of the IOSEA Technical Support / Capacity-building Programme, the objective of which was to ensure that all Signatories were self-sufficient. One of the core tasks of IOSEA was to promote international collaboration, and this would be facilitated through the adoption of harmonised and standardised methodologies across the range of the MoU. Dr Frazier commented that marine turtles had thrived for thousands of years without the MoU, and only relatively recent human interventions had caused the species' conservation status to decline.

25. In response to a question from the United States regarding an assessment of the impacts of artisanal and trawl fisheries, Dr Frazier said that it was easier to obtain information about commercial fisheries as these were better regulated and often had umbrella organizations, whereas artisanal fisheries tended to be undertaken by individuals who were more difficult to contact.

Agenda item 7: Review of implementation progress of the Memorandum of Understanding

(a) Synthesis of national reports – overview of IOSEA MoU implementation to date

26. The Coordinator explained that this broad agenda item was supported by documents [MT-IOSEA/SS.7/Doc. 6](#), [6.1](#) and [6.2](#), which comprised a thorough analysis of the national reports submitted by Signatory States. In addition, a number of analyses requested by IOSEA SS6 had been completed (contained in documents [MT-IOSEA/SS.7/Doc. 10.1](#), [10.2](#), [10.3](#) and [10.4](#)) dealing with illegal take, genetic stocks, socioeconomic and cultural implications of marine turtle use, and fisheries-turtle interactions. There was also a paper on technical support and capacity-building ([MT-IOSEA/SS.7/Doc.8](#)) and two species assessments for the leatherback turtle ([Inf.10](#)) and the loggerhead turtle ([Inf.11](#)).

27. The Synthesis of National Reports ([Doc. 6](#)) was made up of several parts including an executive summary and a table that analysed the information contained in the reports. Exceptionally, because of its importance, this document had been translated into [French](#). Parts [II](#) and [III](#) contained the detailed analysis and the methodology. A review of site-based information was contained in [Doc. 6.1](#), while [Doc. 6.2 \(Rev. 2\)](#) summarised the status of reporting by Signatory States.

28. The reports were linked to the IOSEA Conservation and Management Plan and its six objectives, with sub-activities covering 24 programmes. IOSEA reviewed progress in greater detail than other comparable MEAs and the analyses were broken down for each of the four IOSEA sub-regions. As the format had remained consistent over time, it was easy to make temporal comparisons and to chart progress with respect to particular themes.

29. In terms of fulfilling their reporting requirements, about half of the Signatories had made substantial progress, a quarter of them had made some progress; and the remainder had not updated their reports for some years or, in a few cases, had not reported at all. The online reporting system allowed Signatories to enter their revisions at any time, but many countries waited until just before the meeting to update their information. The Coordinator reminded Focal Points that timely submission of data was important to enable the Secretariat to prepare its analyses.

30. A colour-coded performance matrix showed how much progress each Signatory was making and how well the MoU was doing collectively for each of the 24 programmes of work. Australia, France and South Africa appeared to be performing best, followed by a group of another eight Signatories. Of the four sub-regions, the Western Indian Ocean had distinguished itself, followed by the Northern Indian Ocean and South-east Asia⁺. The Northwest Indian Ocean continued to trail by a considerable margin, in part due to non-reporting by several countries. Overall, there were positive trends for implementation across 14 of the 24 programmes and in 25 of the 33 Signatories reporting, notably the United Arab Emirates, United Republic of Tanzania, Madagascar, Malaysia and Pakistan.

31. Generally, the reports provided a good overview of marine turtle populations and good examples of conservation work and challenges being faced. Improvements could be made by including more information on fisheries by-catch and related mitigation measures, as well as details of conservation of critical habitats outside protected areas, and by including more specific descriptions of resource needs and mobilisation of domestic resources. IOSEA would also benefit from a more equitable sharing of operational costs. Further improvements in implementation could be anticipated when the IOSEA Site Network was fully operational.

32. The Secretariat's analysis highlighted numerous areas in which Signatory State reporting or implementation could be improved. The Coordinator drew attention to nine areas in particular where Signatories might do more. These were:

- Documentation and sharing of exemplary approaches/protocols;
- Detailed analyses of, and solutions to, adverse economic incentives that impede turtle conservation;
- Critical examination of the efficacy of nesting beach management programmes;
- Analysis of new information gleaned from international flipper tag returns;
- Prioritisation of candidate species for further in-depth species assessments;
- Promotion of standardisation and harmonisation of methodology;
- Documentation and review of the efficacy of education and awareness-raising initiatives;
- Review of programmes aimed at promoting alternative livelihood opportunities; and
- Detailed reviews of training programmes and identification of potential synergies.

33. The Coordinator introduced Doc. 6.1, which outlined the complementary site-based information that was available from the national reports, including species occurrence, details of site-specific threats, and conservation/research measures being implemented at sites. Overall, the national reports revealed by-catch in coastal fisheries to be the greatest threat (mentioned at 30 per cent of sites), followed by natural predation (also well-documented at a recent Australian symposium), and excessive egg collection (recorded at 20 per cent of sites in 16 countries). Concluding his remarks, the Coordinator drew attention to eight specific actions requested of Signatory States, set out in Doc. 6.1, which would improve the quality and coverage of site-specific data.

34. The Chair pointed out that Signatories spent a considerable amount of time entering information into the online reporting system. She stressed the important role of the sub-regional groups in providing feedback, and stated that members of the Advisory Committee would attend the sub-regional group meetings to provide guidance. She then opened the floor for questions.

35. The representative of Oman asked what would happen to its data which had been submitted after the deadline. The representative of Australia also indicated that its report had been further updated, after the preparation of the Secretariat's synthesis, and that she was ready to answer any questions. The Coordinator replied that any information submitted after the deadline would not have been taken into account in the analysis presented to the meeting, but would be reflected in similar analyses to be prepared in advance of SS8. The representative of Jordan asked how the Secretariat proposed to encourage those Signatories that had not submitted a report to do so in future. The Coordinator responded that the Advisory Committee had discussed how it could assist Signatories with their national reporting, and he was optimistic that this mentoring would lead to more Signatories reporting and better reporting over all. The representative of the Maldives commended the Secretariat for its work in compiling the analysis and sought clarification of the role of the Focal Points and sub-regional group coordinators in ensuring that reports were submitted. The Chair referred to document [MT-IOSEA/SS.7/Doc.12](#) which contained the terms of reference for national Focal Points, noting that their roles and responsibilities would be discussed in greater detail under agenda item 9 (a).

36. The representative of the United Arab Emirates was gratified by the acknowledgement that its reporting had improved but stressed that help was still needed on certain issues, such as by-catch, incentives to fishermen and regional capacity-building. The Chair asked that all Signatories make their needs for assistance known to the Secretariat.

37. The observer from South Africa pointed out that the reporting template did not seek information on time frames and in some cases it was important to know when an activity had been undertaken. She suggested that the questions should either specify a time frame or request that dates be included alongside the submitted answers. The Coordinator agreed that it would be clearer and simpler if respondents were to annotate their answers with the year(s), in brackets, in which a given activity took place.

38. Concluding the discussion, the Secretariat undertook to produce and make available through the IOSEA website PDFs of all of the latest national reports, including those revised/submitted by Australia and Oman after the deadline.

(b) Recommendations arising from species assessments

39. Introducing document [MT-IOSEA/SS.7/Doc. 9](#), the Coordinator explained that the comprehensive assessments of leatherback and loggerhead turtles had been updated or completed in 2012 and 2013 respectively. Both documents had identified gaps in biology or management that needed to be addressed and included specific suggestions and recommendations in this regard. Preliminary work had already been done at the time of IOSEA SS6 to prepare concepts for small-scale projects to progress some of the leatherback work.

40. Referring to Annex 4 of the report of the seventh meeting of the Advisory Committee (5-7 September 2014), Dr. Nel explained that the Advisory Committee had reviewed and developed further the project concepts arising from the updated 2012 Leatherback Assessment. There were strengths and weaknesses in all regions and an attempt had been made to find synergies where joint action for both leatherback and loggerhead turtles would be possible. The key issues were: genetics, establishing stock boundaries, satellite tracking, hatchery programmes, fisheries interactions, impacts on habitats (e.g. erosion of beaches), climate change and temperature profiles; and the emerging problem of plastic debris.

41. Areas upon which to focus included improving leatherback hatching success in Mozambique, devising a low-cost monitoring protocol for Sri Lanka, and examining egg relocation and hatchery practices in Malaysia and Thailand. Data were scarce for nesting sites in Java and Sumatra and this might be addressed at low cost by mobilising local communities. A large amount of aerial survey work had been done in Papua New Guinea and good progress was being achieved. Habitat rehabilitation was a concern across all regions and a critical study of efforts to prevent erosion by planting casuarina trees could be done.

42. Dr Nel identified three further projects that could be pursued regarding loggerhead turtles. One would examine hatchling production, dispersal and survival rates; a second would analyse existing data from Oman, Yemen (Socotra), and Sri Lanka; and a third would assess the species' vulnerability to climate change, including changing sex ratios.

43. The representative of the United States asked whether there were plans for a similar assessment to be made for the hawksbill turtle. The Coordinator replied that the Advisory Committee had indeed identified hawksbills as the next priority and a small working group had been established to take such an assessment forward. At the same time, the IUCN Marine Turtle Specialist Group was working on a substantial initiative for green turtles. The Advisory Committee had sought guidance from the Signatories on where to focus its efforts, as the species assessments were substantial undertakings requiring wide consultation. A draft of the hawksbill assessment was expected to be ready for presentation to the next Meeting of Signatories.

44. The Chair asked the sub-regional groups to consider priorities so that the programme of work could be drafted appropriately and a decision made on which of the various projects described by Dr Nel should progress.

(c) National networks/committees

45. The Chair introduced document [MT-IOSEA/SS.7/Doc.14](#) which addressed the question of how to facilitate engagement and build networks of responsible agencies and stakeholders. The Secretariat had issued a questionnaire to Signatory States and a further three replies had been received (from Australia, Oman and Yemen) beyond the surveys conducted at previous meetings. Some feedback had come from countries with functional national committees and many of these sounded very promising.

46. Oman reported that its national committee had been established by ministerial decision in 2013. All key agencies and ministries were involved, with the Ministry of the Environment in the chair. Key NGOs also participated. The national committee had terms of reference and a mandate to develop a national conservation strategy.

47. The national committee of the United Republic of Tanzania was chaired by the Director of Fisheries and included NGOs, universities and government. Several meetings were held each year and one of the issues discussed was the nomination of network sites.

48. Kenya's national committee had been established some years ago, and conservation groups and communities were engaged. A national marine turtle strategy had been devised as well as a complementary one for coral reefs. There was a dedicated national sea turtle task force, as well as local site committees. The Kenyan coast had been divided into five areas and there was a need to harmonize activities because of the overlaps.

49. Mauritius had a national committee in which government agencies including fisheries, the private sector and NGOs such as the Marine Conservation Society were involved. Regular meetings were held, and the committee had identified suitable areas of activity, such as combating poaching and improving data collection.

50. In the Seychelles, the Turtle Action Group was now a recognised association of stakeholders that included the tourism sector and conservationists; the university would be approached to join too and the Government was becoming more involved.

51. The Chair of the Advisory Committee suggested that Focal Points revise their questionnaires to ensure that this sort of information was captured for future reference.

(d) Sub-regional groups and related coordination mechanisms

52. The outline for sub-regional consultations was contained in Document [MT-IOSEA/SS.7/Doc. 2.1](#). Sub-regional groups convened on several occasions during the meeting to discuss their inputs into the programme of work. The groups were asked to focus particularly on the recommendations emanating from the Advisory Committee and the following issues: illegal trade and take; genetic stocks; socio-economic factors; fisheries interactions; capacity-building and technical support; species assessments and the Advisory Committee's recommendations on the site network. The deliberations of each of the sub-regional groups are captured in Annex 4 and in the Action Points arising from the Seventh Meeting of Signatory States (Annex 8).

(e) Current use and further development of online implementation tools

53. The Coordinator gave a presentation highlighting some of the main features of the [IOSEA website](#). These included the dynamic news page, species and site information, online reporting system, bibliography resource and electronic library, satellite tracking and flipper tag databases, useful contacts and projects databases, and an extensive archive.

54. He demonstrated the new [International Flipper Tag Recovery database](#) which could be interrogated using a modern interface searchable by various parameters. Delegates were asked to register and provide data and feedback. The initial emphasis was the Western Indian Ocean – where more entries were needed from Kenya, Mauritius, Mozambique, Seychelles and United Republic of Tanzania – but the database would be extended to cover other regions as well.

Agenda item 8: Major thematic issues

(a) Network of sites of importance for marine turtles and their habitats

55. The Coordinator introduced Document [MT-IOSEA/SS.7/Doc.7](#) and explained the fundamental purpose of the IOSEA Marine Turtle Site Network and expectations of how it would work. The related Evaluation Criteria had been carefully developed over a long period. He said that the initial feedback received from the Advisory Committee, which had used the criteria for the first time, suggested that they were fit for purpose.

56. The Secretariat had been involved in formulating draft nomination forms for potential candidate sites and had actively encouraged official site nominations from Signatory States. The first submission came from the Department of Fisheries of the United Republic of Tanzania, in October 2013; credit was due to Ms Lindsey West (Sea Sense) for having helped develop the proposal. In all, 11 nominations had been submitted, however one proposal was incomplete and another was lacking the official letter of endorsement at the time of submission. The Advisory Committee had therefore considered nine proposals, most of which had been received well after the agreed deadline for submission (i.e. six months prior to the SS7 meeting). The uncertainty over the date of the meeting might well have contributed to the late submission of nominations. The Advisory Committee had reviewed the nominations and, following a suggestion from the Secretariat, had decided to recommend either conditionally or unconditionally the acceptance of candidate sites into the network. The Advisory Committee would work with the countries during the meeting and afterwards to ensure that nominated sites successfully cleared the process.

57. The Coordinator informed the meeting that the draft report of the Advisory Committee meeting included an annex containing the Committee's recommendations regarding the site nominations. He pointed out that the nomination from the Philippines had not been reviewed because it had not been accompanied by a formal letter of endorsement. The letter had been received on the first day of the meeting, so the Meeting should decide how it wished to proceed.

58. First, each of the Signatories that had nominated a candidate site was invited to make a brief presentation (in order of date of submission each proposal), as follows:

United Republic of Tanzania (Rufiji - Mafia Seascape)

59. The site comprised 3,950 km² of mangrove forests. Mafia Island was a marine park and Rufiji was a Ramsar site. The zone had been a Marine Protected Area since 1995. It was highly biodiverse, with a large green turtle breeding rookery. Hawksbill turtles, waterbirds and cetaceans were also present and the site was considered the last refuge in the country for dugongs.

South Africa (iSimangaliso Wetland Park)

60. The Wetland Park was located in the far north-east of South Africa, on the border with Mozambique. It was a UNESCO World Heritage Site and a Ramsar Site. It covered 200 km of the coastline and extended three nautical miles offshore. Noted for its rich biodiversity and natural beauty, it contained nesting beaches frequented by 1,000 loggerheads and 70 leatherbacks. There were also foraging populations of green and hawksbill turtles. The area had been protected for over 50 years and was covered by national legislation. It was unspoiled with relatively little development and was considered a potential refuge for species affected by climate change. A moratorium on taking turtles was in force and former subsistence users were now paid community monitors. The site could also increase the profile of marine turtles as an important element of South Africa's fauna, taking them out of the shadow of elephants and rhinoceroses.

Myanmar (Thameehla / Diamond Island)

61. The site was located in an uninhabited stretch of the Bay of Bengal at the mouth of the Patheingyi River. The topography was undulating low cliffs. The site had been managed by the Department of Fisheries since 1963 (although for a short period in the 1980s there was a military garrison established there). It had been a Marine Protected Area since 1970s; visitors were permitted but all taking of turtles was prohibited. Two beaches were presently suitable for nesting. Green and olive ridley turtles were among the rich fauna. Unfortunately hawksbill turtles were heading for local extinction as a breeding species. Some fisheries were operating in the area; the larger scale trawl fishery was beyond the control of local officers, who were doing all they could to protect the declining turtle population against by-catch.

Islamic Republic of Iran (Sheedvar Island)

62. The Secretariat made the presentation on behalf of the Iranian Focal Point, Mr Asghar Mobaraki, who was unable to attend the meeting. The site was located on a low-lying island in the Persian Gulf. It had a small population of hawksbill turtles, with occasional green turtles and breeding colonies of terns and cormorants. It had already been designated as a Ramsar site and was entirely in public ownership. There were few fisheries in the area, but the proximity of the Lavan oil refinery meant that pollution from leakages was a possibility. Some sand extraction and bird egg collection was occurring.

Seychelles (Aldabra Atoll)

63. The site was situated in the far west of the country's EEZ, more than 1,000 km from the national capital, Victoria. There was no permanent human population, only some scientists at a research station. There were between 3,000 and 5,000 green turtles, representing a five-fold increase since 1968, as well as some 30 nesting hawksbills. Monitoring had been undertaken since 1981, and genetic studies had been carried out on green turtles (Bourjea 2007) and hawksbills (Phillips 2014). Also present were 100,000 adult giant tortoises and endemic birds. Feral goats, which had destroyed the trees that offered shade to the tortoises, had been eradicated. The Seychelles Islands Foundation managed the site, one of two in the country recognised by UNESCO's World Heritage Committee. It had been protected since 1968 and was a source of national pride.

Comoros (Itsamia, Mohéli)

64. The site covered three islands and included Itsamia, a conservation village. There were five nesting beaches and the most common species was the green turtle. Poaching was a threat, but public awareness was being raised through the annual celebration of Turtle Day (28 May). The Mohéli Marine Park had been established in 2001 and it included ten separate reserves. The island incorporated a Ramsar Site in an old crater and the proposed network site was also home to endemic Livingstone bats.

United Arab Emirates (Bu Tinah Shoal)

65. The site, situated in the emirate of Abu Dhabi, had high biodiversity but very harsh conditions, being hot and very saline with high evaporation. Beyond hawksbill and green turtles, the local fauna included dugongs, dolphins, flamingos, ospreys and Socotra cormorants. The habitats included mangroves, coral reefs and sea grass meadows. There was not much human activity but the island was being promoted as a green destination and was seen as a living laboratory to study climate change in the Gulf.

United Arab Emirates (Sir Bu Na'air Island)

66. The island was situated west of Sharjah and had rich deposits of iron and sulphur. There was minimal human activity and the island was a sanctuary for birds such as Sooty gulls. The Citron goby was found off the island, together with 40 species of corals which had suffered severe bleaching incidents in the past. The state agency was working with EWS-WWF at the site which hosted 324 hawksbill nests and recently also two green turtle nests. Traditionally the island had been used as a shelter in bad weather and as a source of fresh water. The Sharjah Government was developing ecotourism and a resort was being planned, but this would be confined to just 1 per cent of the island, away from nesting beaches.

France (Europa Island)

67. The Secretariat made the presentation on behalf of the French Focal Point, who was unable to attend the meeting. The site was the southernmost of the Iles Eparses in the Mozambique Strait. The only human population was a gendarme. The habitat was pristine and the fauna included green and hawksbill turtles and many endemic species. It was already a Ramsar Site and a candidate UNESCO World Heritage Site. Invasive alien species – rats, goats and two plant species (sisal and choca) – posed a problem.

Philippines (Turtle Islands, Tawi Tawi)

68. Marine turtle conservation started 1979 by executive order of the President and the sanctuary at Tawi-tawi was established under a 1999 proclamation. The site was in the far south-west of the country close to the delimitation of the Philippines and Malaysia. It was subject of a bilateral memorandum of agreement and was the recipient of the 20th J. Paul Getty award. The area had extremely high biodiversity, including 1,000 nesting green turtles, but poaching was a threat. Foreign vessels were encroaching into Philippines' waters and fishing illegally and taking turtle eggs.

69. Following the presentations, a lengthy discussion ensued that addressed two fundamental issues: (1) the conditions for acceptance of any given proposal, recognising that some of the submitted proposals needed substantial improvement; and (2) whether or not the proposal submitted by the Philippines (which had not been reviewed by the Advisory Committee owing to the initial absence of an endorsement letter) should be considered by the Meeting.

70. With regard to the first issue, the Chair described the decision framework that had emerged from the Advisory Committee's deliberations. It provided the Meeting with a range of recommended actions with respect to any given proposal, from unconditional endorsement through to outright rejection. The categories initially tabled for consideration were:

- Acceptance of the proposal, without the need for further revision (except for Secretariat editorial corrections)
- Acceptance of the proposal, subject to clarification/minor revision to be completed by the proponent before conclusion of SS7
- Conditional acceptance of the proposal subject to the provision of additional information by the proponent within [six] months of the conclusion of the SS7 followed by Advisory Committee review and positive recommendation
- Recognition that the proposal had merit but required substantive revision prior to resubmission for reconsideration at the next meeting of SS
- Rejection of the proposal, on the grounds that it was unlikely to meet the criteria for inclusion, even if substantive revision were undertaken.

71. The proposed categories took into account the unique circumstances surrounding the late submission of most of the proposals to the present meeting, many of which would benefit from additional work to improve their content and presentation. The discussion that followed touched on several pertinent issues, including: whether six months was sufficient time for proponents to provide additional information to improve their submissions; the status of such proposals (i.e. were they considered as having met the criteria for inclusion in the network or not); the nature and extent of the revisions requested of proponents (i.e. substantive versus presentational); the implications of deferring consideration of some proposals until the next meeting; and the mentorship role of the Advisory Committee in helping proponents to improve their submissions. The discussion also touched on the importance of presenting proposals of the highest possible quality (for example, by posting the completed Site Information Sheets on the IOSEA website), since it was hoped that they would eventually be used to attract donor funding.

72. The Advisory Committee had carefully and thoroughly reviewed each of the proposals using the agreed scoring criteria, to determine whether or not the individual proposals attained a minimum benchmark score of at least 75 points, across the 18 evaluation criteria. The Committee had formulated recommendations with respect to the proposals and Committee members had worked with proponents in the margins of the meeting to address issues in the proposals that had been submitted.

73. There was a lengthy discussion of the adequacy of the 5-point decision framework that had been presented (see paragraph above), in relation to submissions made to the present meeting. Eventually, following interventions from several delegations including the Maldives, United Kingdom, United Arab Emirates, United States, and United Republic of Tanzania, a simplified decision framework was agreed as follows:

1. Proposal is accepted (evaluation score is equal to or above the 75 minimum threshold)
 - a. Site Information Sheet is ready to publish on the IOSEA website
 - b. Site Information Sheet needs revision prior to publication on the IOSEA website
2. Proposal is not accepted (evaluation score is below the 75 minimum threshold)
 - a. Proposal lacks substantial detail and needs significant reworking before resubmission
 - b. Proposal does not meet the criteria.

74. It was generally agreed that six months after the conclusion of IOSEA SS7 (i.e. which computes to 12 March 2015) was a suitable time frame within which necessary revisions to the Site Information Sheets should be made. Dr Frazier assured the Meeting that the Advisory Committee was committed to spending the requisite time in its mentoring role to ensure that the nominations were of a sufficiently high standard.

75. The Meeting also discussed whether or not the proposal submitted by the Philippines, but not yet reviewed by the Advisory Committee, could be considered. The Chair of the Advisory Committee, Dr Frazier, expressed his concern that the meeting would spend an inordinate amount of time dealing with one proposal. At the same time, he stressed that the Advisory Committee wanted to assist Signatories in making good proposals and he was reluctant to stand in the way of a promising site. Dr Limpus said that the task of assessing nominations was time consuming and needed to be done thoroughly. Given the limited time available and the heavy agenda, he doubted that a proper evaluation could be made. Mr Al-Kiyumi, speaking on behalf of the delegation of Oman, expressed his view that procedures should be respected and that it was unfair to treat late submissions in the same way as those that had adhered to the deadline. The representative of the Philippines pointed out that only one nomination – that of the United Republic of Tanzania – had been submitted on time and that strictly enforcing guidelines did not serve the interest of conservation.

76. While some delegations spoke in favour of having the Philippines proposal considered, consensus on the matter was not reached until the following session when Mr Al-Kiyumi, speaking on behalf of the delegation of Oman, said that he was prepared to lift his objection on the understanding that, in the future, deadlines would be respected given the importance of the site network and the need for nominations to be dealt with properly and thoroughly. In the meanwhile, some members of the Advisory Committee present had reviewed the Philippines proposal and had determined that it met the criteria for inclusion in the Site Network, alongside all of the other proposals that had been reviewed.

77. The IOSEA Marine Turtle Site Network was thus formally established with an initial contingent of ten sites. Taking into account the Advisory Committee's recommendations, the Site Information Sheets for four of the accepted proposals (qualifying for Category 1a) were deemed suitable for publication on the IOSEA website. These were the proposals for: Europa Island (France), Aldabra Atoll (Seychelles), iSimangaliso Wetland Park (South Africa) and Rufiji - Mafia Seascape (United Republic of Tanzania). The remaining six sites in Category 1b (i.e. those submitted by Comoros, Islamic Republic of Iran, Myanmar, Philippines and United Arab Emirates – listed in the paragraphs above) were also accepted for inclusion in the Site Network, but it was agreed that their Site Information Sheets would be published only after the requisite changes had been effected.

78. Concluding the procedural discussions, the Chair reiterated that all proposals in future nomination rounds would have to be submitted six months in advance of the Meeting of Signatories; and she insisted that the deadline would have to be respected. For the current exercise, proposals falling under Category 1b would have six months from the end of the meeting to make the necessary amendments in consultation with the Advisory Committee.

79. The Advisory Committee noted that some minor adjustments to the Evaluation Criteria were contemplated in the light of the experience gained and these would be notified to the Secretariat in due course. Dr Limpus indicated that one criterion that might have to be re-considered was the number of nesting turtles, which should not be purely numeric but should also take account of the proportion of a stock's population. Dr Frazier suggested that consideration might be given to raising the 75 point threshold for qualification. Dr Nel noted that half of the sites considered at the meeting came from the Western Indian Ocean sub-region, where a workshop on the site network criteria had been organised. This had helped considerably in the development of proposals; and another 14 or 15 potential sites were interested in submitting proposals. She suggested that other sub-regions might wish to follow this preparatory approach. The representative of the United Kingdom suggested revising or annotating the site nomination forms so that they reflected the evaluation criteria more closely. She volunteered, joined by six other countries – namely Australia, Mauritius, Oman, Seychelles, Thailand, and the United States – and Advisory Committee member Ronel Nel, to form a working group tasked with revisiting the Site Network Information Sheet template in the months following the meeting.

80. The meeting recognised that the main priorities for operationalising the Site Network centred on funding and capacity-building. The Coordinator recalled that some scenarios for the network had been presented at IOSEA SS6, reflecting different levels of funding (see document [MT-IOSEA/SS.6/Doc. 7](#)). Preliminary consideration had been given to which foundations or companies might be approached. Corporate offset schemes operated in Australia and some multinationals might be amenable to supporting environmental projects abroad if they suited their corporate portfolio. Within IOSEA, some Signatories had access to funds while others needed support. New sponsors might be attracted if they were made aware of the network and the constituent sites. Local publicity could be achieved by holding dedication ceremonies at the sites. IOSEA should draw on the experience of comparable migratory bird networks which promoted connectivity and cooperation, and helped to attract funding.

81. The Chair proposed reappointing the Steering Committee that had been set up previously. Its membership had included Australia, Mauritius, Oman, United States and a representative of the Advisory Committee. Lindsey West (Sea Sense, Invited Expert) and Marina Antonopoulou (EWS-WWF) also agreed to serve, and Mr. Hykle also offered to continue his involvement in a *pro bono* capacity during his special leave of absence.

(b) Further development of the technical support/capacity-building programme

82. Dr Miller gave a presentation on technical support and capacity-building. A slightly modified version of his presentation would be prepared to take account of the Advisory Committee discussion and comments from Signatories. He observed that IOSEA was a diverse region politically, linguistically and culturally. The MoU's goals were generally well understood and processes had been adopted to help implementation, including workshops, online reporting and species initiatives. However, despite the good quality of the programmes, the level of detail about implementation given in the national reports was insufficient. This needed to be addressed.

83. Dr Miller identified a number of issues. The national report format was not designed to provide answers to questions related to capacity-building. The phraseology used in some questions required a positive answer in the affirmative, while others required a negative response to convey the same sentiment. Yes/No answers were helpful in identifying whether issues were important, but did not provide indications of the extent of problems or the effectiveness of solutions.

84. The Advisory Committee existed to provide help, and assistance could be tailored to individual countries or sub-regions. While many Signatories seemed to want guidance on similar issues, clear sub-regional trends were apparent. It was important, however, for Signatories to update their national reports regularly. Dr Miller asked that details of training and capacity-building events that had been held be compiled, together with their dates.

85. The Chair requested the sub-regional groups to add a discussion of capacity-building needs to their agenda. Dr Tiwari suggested also that capacity-building needs and activities be reflected also in the documentation prepared for site network nominations.

(c) Reviews/analyses arising from the Sixth Meeting of Signatory States

i. Illegal Take and Trade of Marine Turtles

86. The Coordinator introduced Document [MT-IOSEA/SS.7/Doc.10.1](#), containing the results of a study requested by the previous Meeting of Signatories and which was the first attempt by the Secretariat to address this topic. Poaching involving Chinese and Vietnamese fishermen was especially prevalent in South-east Asia, particularly in the Coral Triangle area. The main markets were in mainland China, Taiwan and Japan, while Bali was a hotspot for trade in live green turtles; and poachers from Hainan Province, China, were operating in Malaysia. There were more localised problems with poaching in Kenya, Madagascar and Mozambique. With regard to egg collection, the report highlighted Kalimantan, Indonesia, as supplying Malaysia – with the state of Terengganu being a particular hotspot.

87. There were considerable overlaps and potential for synergy with the activities of other organisations. TRAFFIC had been doing research in the region and had found that the ban in Viet Nam imposed in 2002 had reduced demand, but some trade was still being undertaken at sea. Clandestine markets had been found operating in East Africa in 2000.

88. There were three main drivers: socioeconomic factors such as high prices encouraging illegal trade and demand for basic nourishment; cultural factors such as traditional beliefs and taste; and inadequate legislation or enforcement. Legislation differed from country to country and even between provinces and states, as was the case in Malaysia.

89. Solutions included aiming incentives directly at stakeholders, i.e. paying them to do something else, but this could be both costly and bureaucratic. Ecotourism – an example of “conservation by distraction” – was an alternative, while religious edicts were effective in some countries. The U.S. State of California had cooperated with Indonesia to run training and enforcement workshops. Potential partners included INTERPOL, ASEAN and the International Consortium on Combating Wildlife Crime, which was primarily concerned with ivory and rhino horn but might be receptive to investigating other forms of wildlife crime. It was one of the organisations with which IOSEA should make contact. Increased public awareness and better enforcement of existing laws could be achieved in conjunction with national authorities, CITES and TRAFFIC. CITES had been invited to attend the present meeting. While the CITES Secretariat had been unable to attend, the German Federal Agency for Nature Conservation (BfN) represented CITES on behalf of the Secretariat.

90. The invited expert from the Marine Conservation Society welcomed the Secretariat’s paper. Many of the issues had been discussed during the meeting of the Western Indian Ocean sub-region. It was clear that elephants and rhinos had greater exposure in the media than marine turtles. He suggested that the Secretariat try to mount a media campaign to raise the issue and awareness of wildlife crime affecting turtles. The Coordinator felt that such a media campaign might overstretch the resources of the Secretariat, noting that other organisations were quite active in this area, but agreed that the contents of the Secretariat’s report should be repackaged for wider public consumption.

91. The representative of the United States mentioned that the Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC) had prepared a study with funding from CITES on the status of hawksbill turtles, which highlighted illegal trade within its area. IOSEA might also want to collaborate with CITES, possibly looking at markets in China which were the main drivers of the trade. Dr Frazier agreed that collaboration with the IAC and INTERPOL made sense. Wildlife crime received less attention than illegal trade in arms and drugs, but the structures were often the same.

92. The observer of the German Federal Nature Conservation Agency welcomed the informative paper, saying that despite years of involvement in CITES he was astonished to learn of the extent of the illegal trade in turtles. Possibly a greater proportion was for domestic markets and therefore was not brought to the attention of CITES. There were existing networks of willing partners such as the International Consortium on Combating Wildlife Crime, so there was no need to reinvent the wheel. It was necessary to raise public awareness of the plight of turtles to the same level as for rhino horn and ivory.

93. The Coordinator suggested that IOSEA make a joint approach with IAC to raise the profile of the marine turtle trade at the next CITES COP, which would be held in South Africa in 2016.

94. Dr Limpus recalled that CITES had been active in combating illegal trade in marine turtles and monitoring the legal trade in hawksbills in the 1980s and 1990s. When Japan withdrew its reservation in 1990, many thought that the battle had been won, but new channels of illegal trade had opened up. He agreed that it would be a good time to re-engage with CITES, pointing out that CMS had a second marine turtle MOU for West Africa. He therefore encouraged the parent Convention to be involved.

95. The representative of the CMS Secretariat said that CITES and CMS had had a joint work programme for nine years. A revised version had been accepted by the CITES Standing Committee and would be considered by the CMS Standing Committee in November. Marine turtles were covered but were not mentioned as a top priority, as CITES had not identified international trade to be a major issue. This might have to be re-examined in the light of evidence presented at the present meeting.

96. The representative of the Philippines reported on two regional workshops, one led by TRAFFIC for South-East Asia and another organised by the US Fish and Wildlife Service. Unfortunately neither was attended by representatives from China. She said that Chinese fishermen were poaching turtles from Philippine waters with alleged connivance of some Vietnamese fishermen. It was necessary to provide alternative livelihoods. The Philippines had been successful in improving enforcement and had made some progress toward educating the judiciary about the seriousness of wildlife crime.

97. The Secretariat requested feedback from the Signatories on the desk study it had undertaken, especially from the Western Indian Ocean sub-region. The observer from the Marine Conservation Society, recognizing the limited capacity of the Secretariat and the impending upheaval of the Secretariat's move on Bonn, suggested that a working group be established to take the issue forward.

98. The observer from the Emirates Wildlife Society - World Wide Fund for Nature (WWF), Ms Marina Antonopoulou, gave a [presentation](#) describing the activities of WWF and TRAFFIC in this area. They had jointly examined the operation of market forces in China and Japan relating to the trade in marine turtles. The Chinese market was found to be the greatest driver in South-east Asia, with 150 whole animals and 7,000 parts valued at US\$500,000. In Hainan province, by-catch contributed to supply the demand, together with Chinese vessels engaged in smuggling. There was also a growing online market. Illegal trade was prevalent in Hainan and Guangxi Provinces where enforcement was lax. However, radio messages in Mandarin and Cantonese and workshops had begun to raise stakeholder awareness.

99. Dr Frazier noted that there had been trade in turtles in China for a very long time and changing attitudes would not be easy. Dr Limpus said that vessels were equipped with specialised gear and travelled long distances; this suggested that profits would have to be high to make such investments worthwhile. The representative of the United Kingdom reported that a conference had been held in London in February 2014 to seek international commitment to combat wildlife crime. Twenty-five actions had been endorsed by 41 countries including China and Viet Nam. It was still possible for further countries to sign the Declaration. A follow-up meeting was being planned for March 2015.

ii. Marine Turtle Genetic Stocks of the Indo-Pacific

100. Dr Limpus introduced document [MT-IOSEA/SS.7/Doc.10.2](#) containing a paper which he had co-authored with Dr Nancy FitzSimmons. He explained that marine turtles returned to their home area, if not necessarily their natal beaches. After dispersing from the mating areas, most females returned to the same beach to lay their eggs, although a minority did not. The gene exchange was low, so the various stocks had grown distinct. In order to identify boundaries between the stocks, it was necessary to have data on genetic analyses from multiple sites. This necessitated tagging on large scale.

101. For the loggerhead turtle *Caretta caretta*, five stocks had been identified – with one in Sri Lanka still to be analysed (but with the likelihood that it would prove to be separate), and another in Yemen which might be linked to the stock in Oman. No replacement from other stocks was taking place.

102. For the green turtle *Chelonia mydas*, there were 30 different stocks with a far more complex structure for which more analysis was needed. By way of example, two sites in Taiwan just 200 km apart were considered separate stocks, whereas four sites in the Federated States of Micronesia were considered to be a single stock despite the vast distances between them. Some stocks might have as few as ten breeding females, while others had tens of thousands. Maintaining biodiversity meant it was as important to retain the small populations as the larger ones.

103. Stocks were defined by their breeding areas, but tagging was required in order to find out where they went when they were away from their native beaches. It was known that loggerheads that bred in Australian waters of the Western Pacific passed through New Zealand waters and ended their journey off Peru before returning to breed in Australia aged 30 years. Therefore stock management could not be confined to North Queensland but had to be conducted across the species' entire range.

104. The representative of Sri Lanka sought advice on how to store and analyse collected samples. The United Arab Emirates had also gathered some turtle samples while surveying dugongs and sought similar advice. Dr Limpus said that any sample of skin, muscle or blood could be kept for years if chemically preserved or frozen. Many laboratories across the world were equipped to deal with samples, and could probably cope with species with which they were unfamiliar, as there was an international DNA database which could be interrogated.

iii. Socio-economic and Cultural Implications of Marine Turtle Use and Conservation

105. Introducing the corresponding document [MT-IOSEA/SS.7/Doc.10.3](#), the Coordinator drew attention to an addendum that had recently been circulated. This contained an executive summary of the much longer document which the Secretariat had distributed in early August 2014.

106. Many social and economic reviews had been undertaken and the document included an extensive bibliography. It covered a multitude of topics with a social, economic or cultural dimension, such as the promotion of alternative livelihoods, with examples given of fishermen collaborating in conservation and management. The role of education from school children to university students was also mentioned, as well as engaging stakeholders ranging from the private sector to indigenous communities. The document had also been discussed by the Advisory

Committee and the Western Indian Ocean – Marine Turtle Task Force (WIO-MTTF), and the insights of these groups would be interesting to hear. The final report of the WIO-MTTF meeting, held on 7 September 2014, appears in Annex 5.

107. Dr Frazier said that cultural awareness was important especially for IOSEA, as it operated in such a diverse region where even some countries were far from homogenous. He applauded the work done on this topic by the Western Indian Ocean Task Force and recalled the areas identified in the Advisory Committee report requiring more attention from Signatories; many of these points could be defined as being socio-economic or cultural in nature.

108. The Chair of the WIO-MTTF, Dr Richardson, said that the document was a useful resource that described well much of the work being done. The Task Force considered social, economic and cultural issues as a priority. Three related sub-regional workshops were in the early planning stages. It was important to have a better understanding of the human element and to develop a more multidisciplinary approach in order to become better conservationists. He asked whether other delegates could provide examples of how socio-economic and cultural factors were being taken into account. Several responded with examples from their countries.

109. When the Seychelles' Government wanted to introduce a ban, a GEF-funded training and public information programme was carried out, taking the message to schools. This had led to a decline in eating turtle meat among young people. Local television had many nature conservation programmes, and ecotourism was being promoted, often related to turtle beaches and diving.

110. In Comoros, tourists came to smaller communities to observe turtles; so conservation boosted the local economy and helped to enlist community support in the fight against poaching. An annual Day of the Turtle was held every 28 May, which raised public awareness of the fact that turtles were a communal asset.

111. Dr Hamann reported that in Indonesia, Philippines and Malaysia ("the Coral Triangle") there was considerable focus on socio-economic aspects. The Australian Government had also funded research in socio-economic issues for the marine environment generally.

112. In the United Republic of Tanzania, conservation philosophy included monitoring, benefit-sharing and engagement. It had worked in many programmes where people were engaged in the management of the resources in their areas. Progress was being made in awareness-raising in primary and secondary schools. People were taught how to manage resources and measures were being taken to reduce pressure on marine resources, in particular. Enforcement was available as a last resort, but it was more effective to persuade people to do the right thing through engagement.

113. Marine turtle conservation in Kenya had been delivered for some time through local groups working along the coastline, and active NGOs such as WWF supported initiatives by running training programmes. Efforts were being made to promote alternative livelihoods related to tourism. Five marine parks had been established and fishermen were converting to tourism activities. Funding from the World Bank had been obtained to develop the coastal area, and now communities were producing proposals of their own.

114. In Thailand most nursery beaches were supervised by the government. Public education programmes were being carried out on issues such as responsible waste disposal. Local fishermen were asked to release turtles caught in nets.

115. Dr Richardson cited one case study from Sri Lanka from the mid-1990s. All the eggs on one beach were regularly stolen, but the situation had been reversed when the site became a tourist attraction. There was no outside funding, and the initiative was being run successfully by a local group. The representative of Sri Lanka added that the situation was improving in his country where, until recently, two-thirds of the coastline was not under government control.

116. Out of concern about the destruction of turtle habitat, Cambodia's fisheries administration was trying to involve local communities in conservation work and raise awareness of the value of turtles. Turtles could be a factor in attracting tourists. The authorities were working with local NGOs and international agencies such as CITES and TRAFFIC, and endangered species were covered by proclamations.

117. Australia recognised the right of indigenous people to harvest marine turtles and other fauna, which sometimes led to disputes with tourism operators when they witnessed the taking of animals. There was some resentment on the part of indigenous communities when they cooperated with the authorities by contributing to sustainable management, but were still criticised.

118. The Coordinator said it was encouraging that many exemplary activities had been highlighted in the paper and in the ensuing discussion. IOSEA would benefit if the lessons-learned could be shared more widely and if successful programmes conducted in one country could be emulated elsewhere in the region.

iv. Insights into Indian Ocean Fisheries-Turtle Interactions

119. The Coordinator introduced the last of the major papers arising from the requests of IOSEA SS6, document [MT-IOSEA/SS.7.Doc 10.4](#). This covered productive work with the Indian Ocean Tuna Commission (IOTC), one of the region's main fisheries management organisations. The IOSEA Secretariat had been cooperating with the IOTC Scientific Committee and a working group on ecosystems and by-catch. Over the last decade, the IOTC had shown more interest in fisheries by-catch of marine turtles, sharks and seabirds and related mitigation strategies. IOTC member states were now required to report on their by-catch mitigation efforts.

120. The Annex to Doc.10.4 provided much information taken from the IOTC reports concerning fleets, monitoring efforts (logbooks and by-catch reporting), mitigation measures as well as the use of FADs (fish aggregating devices). The IOSEA Secretariat had participated actively in the IOTC's work on ecosystems and by-catch, but in recent years the Commission's main emphasis had shifted to consideration of shark by-catch.

121. The IOTC had an observer scheme to monitor by-catch, which required data forms to be completed. IOSEA had been asked to advise on how the forms could be improved. The IOTC had begun to organise training sessions focussing on mitigation of seabird by-catch. The Coordinator had suggested that such workshops might be expanded to include guidance on how to deal with by-caught turtles. The IOTC counterparts seemed to be receptive to this idea, which needed to be followed up.

122. Dr Nel had compiled an ecological risk assessment that was commissioned jointly by IOSEA and IOTC. She added that it was difficult to obtain real data relating fisheries effort to turtle by-catch. Longline fisheries tended to be well managed; gill net and purse seine fisheries much less so. Estimates of gill net by-catch ranged from 11,000-50,000 animals but there were questions surrounding the confidence of these figures. Having attended the ecosystem working group, Dr Nel had the impression that its members were interested, but lacked specific knowledge of turtles. The working group examined sharks every year but presentations were being solicited for other species and this was an opportunity for IOSEA to intervene.

123. The Chair said that the Albatross and Petrel Agreement (ACAP) maintained a roster of all forthcoming RFMO meetings to ensure that issues of interest to that Agreement were raised at appropriate forums. She encouraged IOSEA to do this also, assuming that it was agreed that contact with the RFMO should be maintained. Dr Frazier commented that as many national focal points for IOSEA also attended IOTC meetings, it would be a relatively simple step for them to raise issues of concern to IOSEA through resolutions or statements at IOTC. The Chair agreed that such interventions could help lift the profile of IOSEA at the IOTC.

124. The Coordinator reported that in past years Australia had intervened effectively on marine turtle issues in the IOTC, resulting in the adoption of its Resolution 12/04. However more work was required to ensure that the resolution was properly implemented. He noted that the main IOTC Commission meetings tended to be acrimonious, leaving little scope for IGO/NGO intervention. It might therefore be more fruitful to raise the issue of marine turtle by-catch at subsidiary and technical bodies.

125. The representative of Maldives said that IOTC members were submitting management plans and they had to consider how best to address the reporting of by-catch. It had been discovered recently that large-scale turtle entanglement was occurring and this had led to a project being planned, for which funding was being sought. The representative of the United States urged Signatories to take rapid action. He said the conservation status of the turtle population off Oman was a cause for concern, as a result of gill nets, purse seines and long lines; and there was no room for complacency.

(d) Other matters (thematic workshops)

Workshop I: *Artificial light pollution and marine turtles*

126. The Chair expressed gratitude to Dr Kellie Pendoley, Dr Colin Limpus and Dr Mark Hamann for having agreed at short notice to step in and lead the workshop on light pollution after the convenor, Mr Robert Baldwin, had had to cancel his attendance at the meeting. The three presentations touched upon different aspects of the problem.

127. Dr Pendoley's presentation focussed on assessment, measurement and management of Artificial Light at Night (ALAN). She explained that light cues were particularly important when turtles chose a nesting beach; older turtles seemed to be less deterred. Hatchlings used light cues to find the sea and artificial light often led to *disorientation* (typified by turtles going in circles) and *misorientation* (where turtles headed off in the wrong direction). Additional time spent on the beach meant hatchlings grew tired and dehydrated and were vulnerable to predators. Sources and types of artificial light included urban developments, hotels and beach facilities, marinas, ports, onshore and offshore industrial complexes, dredging operations and near-shore vessels.

128. ALAN was an emerging science that covered sodium lights, metal halide, halogen, fluorescent and LED lights. Marine turtles could see light across the range 400-700 nm, being attracted to lower frequency (blues) but they also responded to intensity. High pressure sodium lights contained more green and yellow and were less likely to attract turtles. The areas of the world with the worst light pollution were North America, Europe and Japan; the IOSEA region had relatively low light pollution.

129. The instruments used to measure light pollution tended to be calibrated for the light visible to humans not turtles. Sky Quality Meters and Charged Coupled Devices were used, employing digital camera technology which meant equipment was light and therefore portable. Monitoring of nesting beaches showed the effect of artificial light on the angle of the fan-shaped dispersal of hatchlings.

130. The principal guidance documents on the management of light were Witherington & Martin's [Florida report](#) from 2000 and Western Australia's Environmental Protection Authority [Guidance Document no. 5](#). In Australia, state and federal regulations meant that the Chevron Gorgon Liquefied Natural Gas refinery was subject to long-term monitoring with particular focus on the light emitted from gas flares.

131. Concluding her presentation, Dr Pendoley said that education was key to increasing public awareness. The main light management options were to: (1) Turn the lights off; (2) Choose longer wavelengths; (3) Use low intensity lights; (4) Target the beams and mount the lights appropriately; and (5) Take account of light being reflected from shiny surfaces, such as metal containers. Finally, she noted that the next ALAN conference would be held in Quebec, Canada in May or June 2015.

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132. In the second workshop presentation, Dr Limpus posited that darkness was the best lighting management option at turtle nesting beaches. It had been established that marine turtle hatchlings did not have an innate knowledge of where the ocean was. Studies from the 1980s and 1990s done in Florida showed that artificial lights disrupted all species of turtles, the exception being loggerheads which were not affected there by low pressure sodium lights. Later studies relating to the vision of turtles, sharks and seabirds and by-catch in long line fisheries, showed that loggerhead turtles of Australia responded differently from those of Florida. It was also shown that hatchlings were not attracted by bright lights but moved away from elevated dark horizons because they were blinded.

133. Amber LED lights were promoted as turtle-friendly, as most of the light was in the yellow and red ranges but trials done in Australia on all types of street lighting showed all were disruptive. Accordingly none deserved endorsement as being turtle-friendly. An experiment showed the effect of different lights on the direction taken by hatchlings. With no artificial light, most headed straight for the ocean. With an unshaded light, the deviation was pronounced; but with a vertical shade fitted to the light source the deviation was reduced. The most significant factor in orienting hatchlings was natural light dispersed off the sky, clouds and sea spray. Even urban developments a few km away from a nesting beach were shown to have an effect on hatchling dispersal. Dr Limpus concluded his remarks saying that darkness was the best recommendation, as all lighting needed mitigation.

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134. In the final presentation, Dr Hamman focussed on the human dimension of light pollution. Education and awareness-raising programmes were essentially about passing knowledge from one person to another. However, little was done to evaluate their effectiveness and reports were usually about outputs rather than outcomes.

135. When asked, people said that they cared about turtles and reducing light pollution, but turning the sentiments into action and changed behaviour was a challenge. Ease of action, social and cultural norms, as well as attitudes were factors to making people alter their habits. There was a tendency to believe that the fault lay with others – with hotels and other beachfront businesses perceived as the worst offenders – although street lighting, domestic lighting even away from the seafront and the cumulative effect of a whole town were all factors.

136. Awareness campaigns needed to focus on moral responsibility. Slogans along the line of “turtles need your help” and “you can make a difference” were effective. People were motivated “to do the right thing” and felt an affinity to the cause, especially if they had a personal experience such as watching a rehabilitated turtle being released back into the wild. Businesses were less concerned with the moral argument than adhering to the law and respecting regulations.

Workshop II: Stakeholder engagement through the Community Voice Method

137. Dr Peter Richardson introduced an example of stakeholder engagement in the Turks and Caicos Islands in the Caribbean using the multidisciplinary “Community Voice Method”. There were some 400 licenced fishermen in that British Overseas Territory. The main target species was queen conch but there was some opportunistic direct take and by-catch of turtles. A 1998 ordinance gave limited protection to marine turtles, imposing a size limit but no closed season. Most specimens caught were juveniles rather than fully-grown adults. A genetic analysis of the origin of species determined that the turtles came from different parts of the region.

138. On South Caicos, turtles were not of great economic importance but were an established part of local culture, and there was little support for a ban. After the catch, the subsequent transaction chain varied between one and four parties (sale, butchering, food preparation and end user).

139. A researcher from Birmingham University who was embedded in the community ran a project from 2008 to 2011. He worked with the authorities at the dockside measuring the catch, taking stock samples, doing biometric measurements and fitting tags. Initially the fishermen were wary of the team's interest, fearing that their presence would lead to a ban, so some outreach and educational work was necessary.

140. The Community Voice Method developed at Duke University to deal with land-use conflicts in North Carolina was adapted for use in the Turks and Caicos Islands. The final product was a documentary-style film made up of 33 interviews. Initial reluctance on the part of locals to take part was overcome as soon as a few interviews had taken place. Interviews followed the same structure and lasted one hour on average. Coded transcriptions helped define the narrative for the final film.

141. The film was shown across the island, at 22 events involving 270 stakeholders. The authorities then presented a programme of draft proposals that were thought likely to gain acceptance with local people. More than 70 fishermen were contacted directly. Most of the proposals had majority support; only a smaller 12-inch size limit was rejected. The new regulations also provided for a closed season for hawksbills to coincide with the open season for lobster, an export ban and prohibitions on the take of other species. To facilitate inspections, all catch had to be landed live.

142. Dr Richardson said that the Community Voice Method was very time-consuming, especially as the subjects were engaged in an occupation that was dependent on the weather, meaning appointments were not met if fishing conditions were right. As a side benefit, the public meetings resulted in a keen interest in the associated satellite tracking programme which brought home the fact that the turtles were a shared resource. People who had been very sceptical at the outset admitted that they had completely changed their attitude by the end of the project.

143. In response to questions, Dr Richardson said that it was too early to determine whether the project was having a wider effect, through word of mouth. With expert guidance the method could be applied elsewhere. The documentary had cost GBP 8,000 to produce in the Turks and Caicos Islands; a similar project underway in the southeast of England was going to cost GBP 15,000-20,000. The duration of the project was quite long, having begun on November 2008 and culminating with the adoption of the new legislation in July 2014. Consultations had been carried out over a period of several months in 2011. The interviews had taken three weeks, editing three months and the public showings and workshops a further two months. The next step would be to assess the long-term effects and to ascertain whether behaviour had indeed changed and whether the new legislation was being enforced or obeyed.

Agenda item 9: Institutional matters

(a) IOSEA Focal Point roles and responsibilities

144. The Coordinator drew attention to Annex 1 of document [MT-IOSEA/SS.7/Doc.12](#) which set out in 24 points the roles and responsibilities of national Focal Points. So important was this guidance that it had been translated in the French for the benefit of francophone Signatories. He briefly ran through the main tasks assigned to the Focal Points as described in the guidance.

145. In response to a question relating to which tasks were being performed well and which needed to be improved, Mr Hykle said good examples had been the sub-regional coordination that had taken place in the Western Indian Ocean, liaison with some countries in relation to the nomination of network sites, and efforts to secure funding for IOSEA despite it being a legally non-binding instrument. Weaknesses had included failure to communicate changes of Focal Point or contact details; and the failure of stakeholders to inform the Secretariat of many interesting activities being done to implement the MoU. It was also pointed out that many of the delegates attending the meeting were not the designated national Focal Points, which could have implications for follow-up.

(b) Advisory Committee membership and tasks

146. Referring to document MT-IOSEA/SS.7/Doc.13 on the Advisory Committee, the Coordinator said that of the eight current members, six were present in Bonn. Five members, including Dr Shanker (not present), were reaching the end of their terms. Dr Tiwari had only been appointed at IOSEA SS6 so her term would run until the end of SS8. While Mr Chokesanguan and Mr Al-Kiyumi had both indicated their intention to stand down, the remaining members present (Drs Frazier, Hamann, Limpus, and Miller) were willing to continue and had been re-nominated. Three new candidates had also been nominated: Mr Robert Baldwin, Dr Jerome Bourjea and Dr Ronel Nel. There were no proposals to change the Advisory Committee's terms of reference, but the Signatory States or Committee members might have suggestions about ways of progressing the work more efficiently.

147. The Chair proposed to establish an in-session working group to review the candidacies of all the nominees and to assess the CVs of the prospective new members. Kenya, Maldives, Oman and the United States volunteered to serve.

148. The representative of Australia asked about the process for seeking new candidates. The Chair reminded the meeting that the Secretariat had circulated a note to all Signatory States requesting nominations. The four current members willing to serve a further term had then been nominated, along with three new candidates. In response to a question from the floor, the representative of Comoros confirmed that Dr Bourjea had confirmed his willingness to serve on the Committee.

149. Reporting on its deliberations at a later session, the representative of Oman, as rapporteur of the Working Group, said that based on the CVs and the working group's knowledge of the individuals concerned, all three new candidates had been recommended for appointment to the Advisory Committee. The re-appointment of the four existing members was discussed after all the Advisory Committee members present had left the room.

150. The Chair then asked the representatives if they were willing to appoint all seven nominees. Both the Maldives and the United States expressed their confidence in the entire slate of candidates. There was a brief discussion of the composition of the Committee, the maximum membership of which had been set at ten, with guidance regarding the representation of different disciplines, regions and genders. It was noted that while Mr Al-Kiyumi of Oman was stepping down, one of the new candidates, Mr Baldwin, was also based in that country and had a good knowledge of the sub-region.

151. The United States raised the question of how the Advisory Committee would elect its Chair, given that some of the individuals were not present. While the Terms of Reference of the Advisory Committee allowed it to elect its own Chair, the Signatories requested that in the interests of transparency the election should be conducted in such a way that all members could participate. It was not considered necessary for the Secretariat to organise the voting procedure as the incumbent Chair, Dr Frazier, had always been scrupulously fair in conducting the Committee's business.

152. All seven candidates were thus elected *en bloc* and the views on the meeting concerning the election of the Chair were conveyed to the Committee.

153. With regard to the sub-regional Focal Points with nominal observer status in the Committee, it was pointed out that the terms of the United Arab Emirates (Northwest Indian Ocean), India (Northern Indian Ocean) and Indonesia (South-East Asia⁺) had expired. Only the position of Madagascar (Western Indian Ocean) was not necessarily due for substitution at the present meeting. Subsequently, each of the sub-regional groups confirmed their respective Focal Points as follows:

- Western Indian Ocean: Kenya
- Northwest Indian Ocean: Oman
- Northern Indian Ocean: Maldives
- South-East Asia⁺: Thailand

(c) Collaboration with other organisations (e.g. IGOs, NGOs, private sector)

154. As reported elsewhere, the Secretariat had collaborated with the Indian Ocean Tuna Commission (IOTC) and it also cooperated with and offered moral support to the work of various NGOs, some of which were present. The meeting had identified potential synergies with other organisations, such as CITES and the Inter-American Convention (IAC) which would be pursued in the coming triennium.

(d) Forthcoming meetings and events of relevance to IOSEA

155. It was noted that the International Sea Turtle Symposium would take place in Turkey in April 2015, possibly providing an opportunity for IOSEA members to interact. An Australia-wide sea turtle symposium would be held in Darwin in mid-2016, as a follow-up to the one held recently in Perth. Precise dates of the workshop, which would have an eastern Indian Ocean theme, would be confirmed as soon as possible.

(e) Next meeting of the Signatory States

156. The Coordinator referred to document MT-IOSEA/SS.7/Doc. 9 which summarized what was required from the Host Government. The Chair said that any initial expressions of interest or even preliminary questions would be welcome at this stage. She pointed out that the Signatory States had never met in a country in the Western Indian Ocean.

157. Dr Nel asked whether an organisation other than a Government could host the meeting. Mr Hykle said that there was a precedent for NGO involvement in the organisation of an IOSEA meeting. For the Fifth Meeting held in Bali, the Indonesian Government had served as the official host, but WWF-Indonesia had provided substantial financial and logistical support.

158. As no Signatory State came forward with an offer to host the meeting, delegates were invited to confer with their Governments and to notify the Secretariat of any expression of interest as soon as possible.

Agenda item 10: Financial and administrative matters**(a) Review of expenditures and status of voluntary contributions**

159. The Coordinator introduced document [MT-IOSEA/SS.7/Doc. 11](#) on financial and administrative matters. He explained that IOSEA was a non-binding instrument under the auspices of CMS and was entirely dependent on voluntary contributions from Signatory States. This arrangement had proved sufficient to sustain the MoU for over ten years. Since the Sixth Meeting of Signatories, contributions had been received principally from the United States, South Africa, United Kingdom, India, Australia, France, Oman and Thailand. Some countries (Maldives, Mozambique, United Republic of Tanzania) had also provided support in keeping with their suggested contributions. The UNEP Regional Office for Asia and the Pacific had also provided vital administrative support and free office accommodation for the first nine years. Interns and volunteers had also contributed to Secretariat work. IOSEA had also benefited from the work of the Advisory Committee members who were unremunerated.

160. The representative of Mauritius indicated that its voluntary contributions for 2012 and 2013, totalling USD 1,000, had not been recorded in the relevant table (an omission which the Secretariat has since rectified).

161. The Trust Fund had begun the year with a balance of about US\$200,000, which had allowed the Secretariat to organise the Meeting of Signatories without a host government. The exchange rate between the Thai baht and US dollar had also been more stable which provided a sounder footing for financial planning.

162. Annexes 1 and 2 of Doc. 11 showed details of contributions to the Trust Fund and its overall status, while Annex 3 contained a table of expenditures compared to budget estimates, with projections until the end of 2014. While the agreed budget for the 2012-2014 triennium had projected expenditure of nearly US\$1 million, income was only US\$600,000 representing a 30 per cent shortfall. Some reductions in expenditure had been achieved, for instance by not replacing the Team Assistant. Much of the development of the Site Network had largely been done in-house. Little funding was available for small projects.

(b) Work programme and indicative budget for 2015-2017

Indicative budget

163. The budget proposal for the 2015-2017 triennium (contained in [Doc. 11, Annex 4](#)) provided, among other things, for a Meeting of the Signatories in the first half of 2017. Some savings could be realised if a Signatory State came forward with an offer to host the meeting. Implementing the MoU's full programme of work required existing donors to continue contributing and more Signatories to pay a fair share of the operational costs. Implementation of the newly established Site Network was potentially costly, but it could be presented as an attractive proposition for donors to support.

164. The budget assumed that at a Team Assistant would eventually be re-employed, the cost of which would be met in part from UNEP's 13 per cent Programme Support Costs and in part through IOSEA contributions. The proposal also assumed that the Secretariat would return to Bangkok, where provision had been made for office space and related costs, at fair value. IOSEA would not be expected to pay rent during the temporary relocation to Bonn.

165. Mr Hykle reported that the cost of the present meeting was expected to be approximately US\$100,000, most of which was taken up with the travel of eligible delegates and the hire of the venue. He stressed that IOSEA was more frugal than some other comparable MEAs. Nevertheless, UNEP recommended that there should be a healthy reserve to cover basic operating costs. At the moment there was an amount equivalent to only about four months' activity in 2015. As IOSEA relied on a relatively small number of major contributors, it would be important for them to transfer funds as early as possible in the new year.

166. The Coordinator pointed out that the proposed budget for the next triennium was slightly lower than that for the period 2012-2014, averaging US\$315,000 per annum. The income side of the budget was based on the artificial construct of "indicative voluntary contributions" based on the UN scale which took account of national GDP. The amounts requested from the main donors had been frozen, while countries with emerging economies had been asked to contribute US\$500. He noted that historically some countries had paid more than the indicative amount.

167. Turning to voluntary contributions, the representative of the United States said that it had willingly supported IOSEA, but there could be no guarantees on the level of future funding and all Signatories should be encouraged to contribute their fair share. If budget restraints left it unable to continue funding at the current level, the MoU would face real difficulties. Australia and Thailand both said that they do their utmost to pay their share towards the budget, subject to the same constraints mentioned by the United States. The United Kingdom had consistently made a voluntary contribution in the past, and efforts would be made to fill the gap in 2014. The representative of the United Arab Emirates said he would make enquiries of the Management Authority to see if any funds were available. The Philippines pointed out that many IOSEA Signatories were also Party to the

parent Convention, to whose implementation IOSEA contributed. For some countries faced with administrative challenges providing funds to a non-binding instrument, it might help if the process of submitting financial contributions to CMS and IOSEA could be combined. The Coordinator agreed that this was a very interesting suggestion that ought to be investigated on an administrative level.

168. The representative of the Maldives asked when the minimum contribution of US\$500 had been fixed. The Coordinator replied that the Meeting of Signatories in Bali in 2008 had introduced a minimum contribution and the arbitrary amount had been suggested by one of the developing countries present. Several Signatories had since made payments in line with that scale, even though the bank charges would have constituted a disproportionately large percentage of the transaction. He added that the Secretariat was willing to assist Signatories by providing paperwork in whatever form to convince finance ministries to pay; invoices could be issued to cover annual payments or the whole triennium.

169. The consensus of the meeting was that the minimum contribution should be raised to US\$1,000 and the Secretariat undertook to produce a revised table reflecting this amount. The only Signatories not present that would be affected by the change were Bahrain and Papua New Guinea. The Coordinator commented that this would mean that the lowest contributors would effectively cover the cost of their attendance at the Meeting of Signatories. When the Secretariat produced the revised table at a later session, Mr Hykle said that he had also prepared a second version, setting the minimum at US\$750, to assuage concerns of some delegates who had privately pointed out that a doubling of the amount expected from the smallest contributors might be difficult explain to their authorities.

170. Ultimately, the suggested minimum contributions set at US\$750. It was further agreed that the Secretariat should issue annual invoices to all Signatory States, who would be given the option of paying for the whole triennium or in instalments. The representative of the United States agreed that issuing annual invoices served as a reminder to Signatories and it was up to them whether they took action. The Meeting endorsed the budget for 2014-2017 and indicative scale of voluntary contributions, reproduced in Annex 6, with the understanding that fulfilment of the programmed budget lines depended on realising the anticipated voluntary contributions.

Work programme

171. The Chair said that a composite report of all the feedback from the sub-regional rapporteurs' summaries had been prepared. Nearly 50 actions were reviewed in plenary, item by item, and it was agreed that the Secretariat would consolidate and edit the document after the meeting as a basis for a work programme for 2015-2017. The final output is contained in Annex 8.

(c) Proposed Secretariat arrangements during special leave of absence of Co-ordinator

172. The meeting was advised that arrangements were being made to cover for the absence of the Coordinator during his one-year special leave of absence without pay, during which time the Secretariat would be temporarily relocated to Bonn. While some savings might be realised through the recruitment of an officer at lower grade, these savings would likely be small as salary costs in Bonn were higher than in Bangkok. As mentioned above, Ms Clara Nobbe of DELC in UNEP HQ in Nairobi had been appointed to assume the Coordinator functions during Mr Hykle's absence.

(d) Additional sources of funding and support for coordination and implementation

173. Mr Earl Possardt gave a [presentation](#) on the workings of the United States' Marine Turtle Conservation Act (MTCA) of 2004, which provided funding for projects to be undertaken in other countries. The priorities under the Act included subjects relevant to IOSEA, such as nesting beach conservation and by-catch mitigation. Congressional funding for the programme had peaked US\$2 million per annum, but was now around US\$1.5 million. A postage stamp scheme, whereby a premium on each stamp was paid into the conservation fund, was about to be revived after a period of suspension.

174. Projects supported over the years had included many of relevance to IOSEA. Projects were currently active in Bangladesh, India, Indonesia, Viet Nam and Yemen. Mr Possardt provided greater details of the projects undertaken in Cox's Bazaar, Bangladesh, and by the Madras Crocodile Bank in India. The State University of Papua was involved in one of the projects in Indonesia, while IUCN-Viet Nam was leading a project in that country which focussed on illegal trade. He commended the team of the Yemen Biological Society for its excellent work despite the dangerous conditions in that country. In response to a question, Mr Possardt said that his presence at the Meeting of Signatories would help to align the MTCA's priorities with those of the IOSEA MoU.

Agenda item 11: Any other business

175. There was no other business, other than a mention by the Coordinator that there had been some media interest in the meeting, and that Dr Limpus had been interviewed by a local agent. The Secretariat would be working with CMS colleagues to produce and circulate a formal press release before the end of the week, which would include the [announcement of the launch of the IOSEA Site Network](#).

Agenda item 12: Closure of the meeting

176. The representatives of the United States, Oman and the Philippines expressed their thanks to the Chair, the Advisory Committee and the Secretariat. Ms Nobbe said that she was looking forward to working with signatories to make further progress with the implementation of the MoU over the coming year. Mr Hykle expressed his satisfaction that the Site Network had finally been established and thanked everyone for their valuable contributions to the Meeting.

177. With all formal business concluded, the meeting was declared closed.

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ANNEX 2: AGENDA

1. Welcoming remarks
2. Signature of the Memorandum of Understanding by additional States
3. Election of officers
4. Adoption of the agenda and schedule
5. Opening statements
6. Reports of the Secretariat and Advisory Committee
 - (a) Report of the Secretariat
 - (b) Report of the Advisory Committee Chair
7. Review of implementation progress of the Memorandum of Understanding
 - (a) Synthesis of national reports – overview of IOSEA MoU implementation to date
 - (b) Recommendations arising from species assessments
 - (c) National networks/committees
 - (d) Sub-regional groups and related coordination mechanisms
 - (e) Current use and further development of online implementation tools
8. Major thematic issues
 - (a) Network of sites of importance for marine turtles and their habitats
 - (b) Further development of the technical support/capacity-building programme
 - (c) Reviews/analyses arising from the Sixth Meeting of Signatory States
 - (d) Other matters (thematic workshops)
9. Institutional matters
 - (a) IOSEA Focal Point roles and responsibilities
 - (b) Advisory Committee membership and tasks
 - (c) Collaboration with other organisations (e.g. IGOs, NGOs, private sector)
 - (d) Forthcoming meetings and events of relevance to IOSEA
 - (e) Next meeting of the Signatory States
10. Financial and administrative matters
 - (a) Review of expenditures and status of voluntary contributions
 - (b) Work programme and indicative budget for 2015-2017
 - (c) Proposed Secretariat arrangements during special leave of absence of Co-ordinator
 - (d) Additional sources of funding and support for coordination and implementation
11. Any other business
12. Closure of the meeting

ANNEX 3: STATEMENTS OF SIGNATORY STATES**Statement of the Representative of the Government of Mauritius,
Mr. Devanand Norungee, Assistant Director of Fisheries, Albion Fisheries Research
Centre****Seventh Meeting of Signatory States to the Indian Ocean - South-East Asian
Marine Turtle MoU, Bonn, Germany, 8-11 September 2014**

“With regards to Chagos Archipelago and Tromelin, Mauritius states the following:

- a. Under both Mauritian law and International law, the Chagos Archipelago including Diego Garcia, is under the sovereignty of the Republic of Mauritius.
- b. The republic of Mauritius does not recognize the so-called British Indian Ocean Territory, which the United Kingdom has purported to create by illegally excising the Chagos Archipelago from the territory of Mauritius prior to its accession to independence. This excision was carried out in violation of international law and of UN General Assembly resolutions 1514 (XV) of 14 December 1960 and 2066 (XX) of 16 December 1965.
- c. The Republic of Mauritius does not also recognize the “Marine Protected Area”, which the United Kingdom has purported to establish around the Chagos Archipelago.
- d. Tromelin also forms an integral part of the territory of the Republic of Mauritius. On 7 June 2010, Mauritius signed an Agreement with France for the Co-Management of Tromelin without any prejudice to the sovereignty of Mauritius over Tromelin. However this agreement has yet to enter into force.”

* * *

**Statement of the Representative of the Government of the United Kingdom,
Dr. Kelly Macleod, Senior Marine Species Advisor, Joint Nature Conservation
Committee**

**Seventh Meeting of Signatory States to the Indian Ocean - South-East Asian
Marine Turtle MoU, Bonn, Germany, 8-11 September 2014**

“The United Kingdom has no doubt about its sovereignty over the British Indian Ocean Territory which was ceded to Britain in 1814 and has been a British dependency ever since.”

* * *

ANNEX 4A: OUTLINE FOR SUB-REGIONAL CONSULTATIONS

Much of the afternoon of Monday, 8 September [continued on Wednesday, 10 September] is reserved for consultations in smaller sub-regional groups¹, to allow for exchange of ideas and experiences among countries with geographic affinity. The sessions can allow for short presentations from countries on significant developments since the Sixth Meeting of Signatory States (January 2012); and for more in-depth discussion of issues that arose in the plenary session of the meeting. Unless the group decides otherwise, the respective sub-regional Focal Point is expected to chair each session. A rapporteur should be appointed from each group to prepare a summary report (in writing) and to briefly present the key points arising from the group's discussions, in plenary. The following common structure had been proposed for each sub-regional consultation; however groups were free to add additional agenda points as necessary (within the time available).

MONDAY, 8 SEPTEMBER

1. **Brief (up to 5 min.) country presentations highlighting key activities undertaken since Jan. 2012**
e.g. interesting research findings, genetics/satellite tracking results, new protected areas / conservation centres, innovative community-based conservation programmes, new management guidelines, significant enforcement problems / actions etc.
2. **Present status of fisheries interacting with marine turtles**
e.g. any new information available on the nature of the fisheries; any results from new studies on fishery-turtle interactions; any new mitigation measures successfully introduced?
3. **Issues / problems concerning illegal take and trade in marine turtles**
e.g. illegal trade with a transboundary dimension in need of bilateral cooperation?
4. **Coastal development issues**
e.g. major development projects initiated or planned, with potential impacts on turtles?
5. **Future / planned national activities and opportunities for sub-region collaboration**
e.g. satellite tracking or genetics studies, by-catch mitigation trials, personnel exchanges for training purposes, joint development and/or distribution of public awareness materials etc.
6. **Use of, and contributions to, various IOSEA Online Tools**
e.g. International Flipper Tag Database, Satellite Tracking Metadatabase, Bibliography Resource, Genetics Directory, Projects Database, etc.

¹ IOSEA sub-region: **South-East Asia**^{*}: Brunei Darussalam, Cambodia, Indonesia, Malaysia, Myanmar, Papua New Guinea, Philippines, Singapore, Thailand, Timor-Leste, Viet Nam + Australia, China, Japan, Republic of Korea, United States; **Northern Indian Ocean**: Bangladesh, India, Maldives, Pakistan, Sri Lanka; **Northwest Indian Ocean**: Bahrain, Djibouti, Egypt, Eritrea, Islamic Republic of Iran, Jordan, Kuwait, Oman, Qatar, Saudi Arabia, Sudan, United Arab Emirates, Yemen; **Western Indian Ocean**: Comoros, France, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa, United Kingdom, United Republic of Tanzania.

- 7. Reporting on marine turtle conservation activities / developments of other relevant organisations**
e.g. PERSGA, ROPME, IOTC, WIOMSA, SAARC, SEAFDEC, BOBLME etc.
- 8. Details of planned meetings, workshops of possible relevance to other countries**
- 9. National / sub-regional Focal Point responsibilities** (& representation through IOSEA SS9)
– Doc.12
- 10. Any other business**
e.g. advanced discussion of particular agenda items, such as 7a, 7b, 8b, 8c etc.)

* * *

WEDNESDAY, 10 SEPTEMBER

- 11. Completion of discussion from Monday, 8 September**
- 12. Discussion of priorities for the sub-regions**
 - a. Illegal take and trade of marine turtles
 - b. Marine turtle genetic stocks of the Indo-Pacific
 - c. Socio-economic and cultural implications of marine turtle use and conservation
 - d. Insights into Indian Ocean fisheries – turtle interactions
 - e. Capacity Building
- 13. Discussion of Advisory Committee recommendations**
- 14. Discussion of Site Network recommendations from the Advisory Committee**
- 15. Drafting of a sub-regional programme of work for inclusion in the 2015-2017 IOSEA work plan**

ANNEX 4B: SUMMARY OF THE WESTERN INDIAN OCEAN (WIO) WORKING GROUP DISCUSSIONS

MONDAY, 8 SEPTEMBER 2014

1. Brief (up to 5 min.) country presentations highlighting key activities undertaken since Jan. 2012 – as at 8 September 2014

Comoros

- Continuation of monitoring of green turtle nesting in Moheli Marine Park in partnership with ADSEI NGO.
- Collaboration with Kelonia on research and capacity-building with respect to green turtle genetics and satellite tracking.
- Acknowledged problem with respect to poaching by fishers from other islands (Anjouan).

Kenya

- Kenya Wildlife Service (KWS) in collaboration with US researchers on effects of climate change on marine turtle reproduction. Temperature loggers have been deployed at nesting sites to provide insight into the impacts of climate change on nest temperatures.
- National seagrass and coral reef strategy to be launched in October 2014 – collaboration between KWS, Kenya Fisheries Department, Kenya Marine Fisheries Research Institute (KMFRI), Ministry of Environment, Cordio EA, Wildlife Conservation Society, WWF, East Africa Wildlife Society (EAWS). Linked to regional coral reef task force via UNEP and the Western Indian Ocean Marine Science Association (WIOMSA). There will be an awareness campaign leading up to launch, including an essay competition in local schools.
- Proposed trans-boundary conservation area between Kenya and Tanzania with support from UNEP Nairobi Convention, which will address issues such as illegal fishing at the border including dynamite fishing. There will be a bilateral meeting in October 2014.
- Cabinet have approved national ICZM policy which incorporates issues related to shoreline management.
- There are ongoing habitat and nesting site monitoring in collaboration with NGOs and local communities
- A biodiversity assessment has been completed in Kisite Mpunguti marine national park and reserve.
- There are plans to secure turtle nesting sites with fencing in Malindi, Watamu, Mombasa and Lamu (Kiunga) to restrict access. Funding from Kenya Coastal Development Project (World Bank funded project).
- KWS will be implementing the MASMA funded Dugong programme that includes habitats assessments, Socio assessments (by-catch assessment), and aerial census.

Madagascar

- New national strategy for marine turtle conservation (2012-2022) published this year.
- Ministries and Focal Person working together to update sea turtle conservation measures and identify priority areas, with work on the ground targeting national marine parks and with assistance of international NGOs.
- Two sea turtle stakeholder workshops planned for Sept (in south of Madagascar) and Oct (in north) 2014 focusing on biology, ecology and social aspects of turtle conservation.
- Vezo community: their approach to sea turtle conservation to be used as a model and is being considered for replication elsewhere around Madagascar.

Mauritius

- A national committee for conservation of sea turtles has been established to prepare a national action plan. Chaired by the Ministry of Fisheries and involving collaboration between Government, NGOs and private sector.
- National sea turtle work will be funded by the Government and Private sector. New work includes surveys to assess sea turtle nesting activity in Mauritius mainland, Agalega and St Brandon.
- Awareness and sensitisation campaigns will be conducted using TV and radio, targeting public, school pupils and developers.
- Establishment of beach patrols at potential nesting sites through development of Ranger Programme. Private guards will be recruited to assist fishery officers in beach patrols and to collect nesting data.
- Surveys will be organised for St Brandon through the national committee to collect data on sea turtles, mammals and birds. Survey Forms have prepared for the collection of data.

Mozambique

- Mozambique is celebrating 20 years of sea turtle monitoring at Ponta de Ouro, which supports 80% of national leatherback nesting and 95% of national loggerhead nesting in Mozambique.
- The Ministry of Environment is leading on satellite tracking and genetics studies.
- Awareness programmes have been established with local communities at Bazaruto Archipelago in Inhambane Province.
- A large port development is underway in southern Mozambique close to Ponta do Ouro.

Seychelles

- Seychelles has implemented long-term monitoring of nesting beaches, with 20 programmes in operation in the country carried out by the Islands Conservation Society, and are currently expanding into southern islands.
- A national marine spatial planning project (funded by The Nature Conservancy) has been established to identify new potential marine protected areas. Currently 50% of land area to be set aside for protection. New MPAs will include nesting beaches on outer islands, with up to 30% of national marine area under negotiation for inclusion in an expanded MPA network.
- Satellite tracking programmes including green and hawksbill post-nesting turtles are underway, and suggest further habitat mapping is needed to identify distribution of seagrass and coral reef habitat.
- A collaboration with IFREMER on green turtle genetics is underway, with a manuscript in preparation. Work with Karl Philips of University of East Anglia on hawksbill genetics was published as a PhD thesis in 2013 – see <https://ueaeprints.uea.ac.uk/48091/>
- The Seychelles' 2nd annual sea turtle festival held was held in August 2014 – with extensive outreach activities. This event has now been approved as an annual event with support from the Ministry of Culture.

South Africa

- A spatial planning project is underway coordinated through the Nelson Mandela Metropolitan University in relation to the IOSEA site network. Sites to be analysed using MARXAN to provide scientific rigour to the selection process.
- Five more post-nesting leatherbacks have been satellite tagged in Kwa Zulu-Natal, all migrated north into Mozambique Channel and remained in inshore, shallow waters (A leatherback has been tracked by India from the Nicobar Islands to WIO region waters). In addition, a sub-adult hawksbill was tracked from Natal to NE Madagascar demonstrating connectivity between sites that was previously unknown.
- Nesting beach monitoring programme is now approx. 50 years old. There are some uncertainties regarding status of the leatherback population. The SA Government will be providing funding to double the monitoring area.
- National management plan for turtles in progress, but not expected to be published within 2 years.
- Tucek et al (2014) published the results of the loggerhead hatchling notching programme, which shows that age to maturity in South Africa's breeding loggerhead turtles is a mean of 36 years.

Tanzania

- 2014 was third successive season of saturation flipper tagging programme during peak nesting season (April & May) at two nesting sites. Preliminary data analyses indicate that the nesting population is much smaller than originally thought.
- Satellite telemetry project started in 2012 to investigate post-nesting migrations of nesting green turtles and identify foraging grounds in the region. 11 tags deployed. Deployment of one tag in Zanzibar filmed by National Geographic and will be screened in October 2014.
- A draft national sea turtle and dugong awareness strategy has been produced by the National Turtle and Dugong Conservation Committee, which is currently being circulated for comments.
- A series of marine legislation seminars were held in 2014 targeting law enforcement authorities, which were designed to sensitise officers on legislation protecting sea turtles and strengthen enforcement efforts.
- A bycatch survey is currently being conducted by Sea Sense in two districts involving at-sea observations during setting and hauling of gill nets and questionnaire interviews with fishers.
- Marine Parks & Reserves Unit has conducted awareness campaigns in MPAs to address widespread consumption of turtle meat, which targeted local fisher communities.
- Flip flop recycling project launched in Mafia Island in 2013. Project is helping to clean nesting beaches in Mafia and generate income for local communities through the sale of recycled flip flop handicrafts.
- Sea Sense NGO has begun teaching modules in marine turtle biology and conservation at University of Dar es Salaam and the Fisheries Education and Training Agency (FETA).

UK

- An updated Conservation Management Framework for the Archipelago will be published later in 2014, and will include measures to further protect natural resources and strengthen enforcement.
- Turtle monitoring on Diego Garcia was revived in March 2011 and is implemented by personnel of the US Naval Support Facility (NSF) Environmental Office in collaboration with Jeanne Mortimer (Seychelles)
- Hays et al (2014) published the results of the first satellite tracking of post-nesting green turtles from the Chagos Archipelago. Seven out of 8 turtles tracked migrated away from the Archipelago, with two turtles migrating to Somalia, four turtles migrating to the Seychelles and one turtle migrating to the Maldives. Funding has been sought to expand this programme with more tags.
- Dr Graeme Hays will be returning to the Archipelago this year to continue his monitoring of nesting beach temperature through further data logger deployment at Diego Garcia.

2. Present status of fisheries interacting with marine turtles

- Ecological Risk Assessment of fisheries interactions in Indian Ocean was completed by Dr Nel for the IOTC.
- An observer programme on purse seiners is now in place in Mauritius to implement the IOTC Resolution 12/04 on the Conservation of Marine Turtles.
- The IOTC Observer programme in SA has not been functioning for the past two years.
- Commercial prawn trawling industry in Tanzania remains closed since 2008.
- Launch of Tanzania National Tuna Strategy in August 2014.
- Paucity of data on bycatch in the artisanal gill net fishing industry in the WIO.
- Tanzania and Kenya have submitted a joint proposal to WIOMSA to conduct a four year research project on gill net bycatch and mitigation. Agreement amongst MTTF members that survey methodologies need to be standardised to enable scaling up in future studies.

ACTION: WIO MTTF members to develop a set of standard procedures for data collection on artisanal gill net fisheries and share on IOSEA website.

3. Issues / problems concerning illegal take and trade in marine turtles

Trade in the coastal states (Kenya, Tanzania, Mozambique) appears to be mostly domestic and is driven by economic s and cultural beliefs. Known targeted marine turtle fisheries exist in Tanzania (in Lindi, Kilwa, Mtwara and Mafia) and Madagascar.

There is evidence of international trade at the island states e.g. movement of turtles from Madagascar to Comoros for export further afield (Asia?). Members agreed that different strategies were needed to address the domestic and international trades.

Proposed strategies to address domestic trade included:

- Engagement of religious leaders for awareness campaigns
- Alternative livelihoods programmes (e.g. livestock keeping)
- Strong enforcement efforts
- Trans-boundary collaboration on education and enforcement
- Legalised take through the application of quotas (needs revised legislation)
- Education of the youth

Proposed strategies to address international trade included:

- Closer collaboration with CITES and other agencies tackling international wildlife crime to ensure issue of marine wildlife trade is on the agenda of future meetings
- Secretariat-commissioned media materials to raise profile of international trade in turtles, with in-built flexibility to facilitate adaptation to national media by signatory states.
- Establish IOSEA working group to provide active support to secretariat in progressing IOSEA work and networking on this issue.

ACTION: UK Focal Point proxy agreed to make representation to DEFRA to include marine wildlife crime on the agenda of international meeting on wildlife crime due to be held in London in March 2015.

4. Coastal development issues

- Four port developments planned in the region: Lamu (Kenya); Bagamoyo and Tanga (Tanzania); Ponta Milibangalala (southern Mozambique).
- Loss of nesting habitat due to tourism development was a concern for Tanzania, Mauritius and Seychelles.
- Proposed LNG plant in Tanzania at Lindi. Close to nesting beaches and foraging habitat.
- Extensive oil and gas exploration in the region.

5. Future / planned national activities and opportunities for sub-regional collaboration

- Site nominations to the IOSEA Network of Sites of Importance for Marine Turtles from South Africa (iSimangaliso Wetland Park), Seychelles (Aldabra), Comoros (Itsamia, Moheli), Tanzania (Rufiji Delta – Mafia Island Seascape).
- Three regional workshops to be held (starting in 2015) focusing on the socio-economic aspects of marine turtle conservation in the WIO.
- Collaborative project called COCA LOCA between South Africa, Oman, Reunion and Mozambique on loggerhead genetics (mixed stock analysis).
- Three year regional dugong research programme (Tanzania, Kenya, Comoros, Seychelles and Mozambique). Workplan includes broad and fine scale mapping of seagrass habitats, socio-economic assessments (by-catch assessment), and aerial census.
- Proposed trans-boundary Marine Protected Area between Kenya and Tanzania.
- Proposal to conduct a four year study of bycatch in artisanal gill net fishery submitted to WIOMSA for consideration. Collaboration between Tanzania and Kenya.
- Collaboration between Comoros (Moheli) and Kelonia to share experiences on marine turtle conservation (project called Poctoi).

6. Use of, and contributions to, various IOSEA Online Tools

- Seychelles, South Africa and France have contributed data to the international flipper tag database. Tanzania data are being validated prior to submission to IOSEA.
- Seychelles, Tanzania, Comoros, South Africa and Mozambique have shared information in the satellite tracking metadatabase. Mauritius will share information once first tags are deployed in early 2015.
- Proposal from Seychelles to develop a repository for regional FAD information to be hosted on the IOSEA website. An approach was made to the Secretariat who supported the proposal.

ACTION: Seychelles to work with Secretariat to augment IOSEA website with FAD information.

7. Reporting on marine turtle conservation activities / developments of other relevant organisations

- Oral and poster presentations on marine turtles were given at 8th WIOMSA Symposium in Maputo, Mozambique in November 2013 by South Africa, France, Tanzania, UK, Kenya, Mauritius and Mozambique.
- 5th meeting of WIO MTTTF task force held at the WIOMSA Symposium (see http://www.ioseaturtles.org/feature_detail.php?id=405).
- Oral and poster presentations at International Sea Turtle Symposium in New Orleans, USA in April 2014 by South Africa, Tanzania and Mozambique.

8. Details of planned meetings, workshops of possible relevance to other countries

- Next International Sea Turtle Symposium to be held in Turkey in April 2015. Travel grants available to delegates that have abstracts accepted.
- Meeting of dugong project personnel in Mombasa in October 2014 (Kenya, Tanzania & Mozambique). Meeting will include presentation on regional seagrass habitat mapping project.
- Meeting between Kenya and Tanzania planned for October/November 2014 to discuss proposed trans-boundary MPA.

9. National / sub-regional Focal Point responsibilities

Sub-regional Focal Point position was handed from Madagascar to Kenya.

10. Any other business

Sea Sense NGO has been selected to participate in the Social Good Summit as part of UN week in September 2014. A short documentary (10 min) has been produced to highlight the role of satellite technology in the conservation of marine turtles. The film will be screened during UN week in New York.

WEDNESDAY, 10 SEPTEMBER 2014**11. Discussion of Advisory Committee recommendations and drafting of sub-regional programme of work for inclusion in the 2015-2017 IOSEA work plan**

Actor	Topic	Comments and Proposed Actions
Signatory States	“Overview of IOSEA MoU Implementation” (document MT-IOSEA/SS.7/Doc. 6)	<ul style="list-style-type: none"> - Moheli (Comoros) to be included as an example of an exemplary approach. - Agreement amongst signatories that hawksbill turtle should be next candidate for a species assessment. - Members to draft a summary of alternative livelihoods projects in each country and submit to WIO MTTF vice chair by 18th Sept 2014. Document will be used as supporting information for potential funders of socio-economic workshops planned for 2015/2016.
	Collaborative research and management	<ul style="list-style-type: none"> - Widespread tissue sampling in the region. To date, samples are being stored but have not usually been analysed. - Challenges related to CITES permits and lack of in-country capacity cited as reasons for extended storage of tissue samples. - Two genetics labs in the region (SA and Reunion) are currently providing genetics support. - Capacity building needed for other countries to enable in-country analyses, particularly as a forensic application during prosecutions of turtle meat traders.
	Identification of genetic characteristics of the nesting populations (document MT-IOSEA/SS.7/Doc. 10.2)	<ul style="list-style-type: none"> - Capacity building needed prior to genetic stock identification. - Green, loggerhead and hawksbill genetics work has been completed but can be extended.
	Leatherback Assessment (document MT-IOSEA/SS.7/Inf.10)	<ul style="list-style-type: none"> - Potential work in Mozambique needs funding as a post-graduate study to ensure scientific robustness. - Post-doc already underway in SA to undertake work related to dune stabilisation.
	Loggerhead assessment (document MT-IOSEA/SS.7/Inf.11)	<ul style="list-style-type: none"> - Study of hatchling dispersal and the impacts of climate change on loggerhead sex ratios is already underway in SA (COCA LOCA project).
	IOSEA Site Network (document MT-IOSEA/SS.7/Doc. 7)	<p>Challenges faced by FPs include:</p> <ul style="list-style-type: none"> - Setting of clear in-country priorities. - Internal government issues. - Limited financial resources to meet commitments.

Actor	Topic	Comments and Proposed Actions
Signatory States	IOSEA Site Network (document MT-IOSEA/SS.7/Doc. 7)	<ul style="list-style-type: none"> - Tanzania and SA shared details of the site network application revision process and agreed that it was a valuable process and well supported by the Advisory Committee. - Comoros welcomed the opportunity to respond to feedback provided by the Advisory Committee to strengthen their site network application. - WIO MTTF Chair expressed sincere thanks to the Advisory Committee on behalf of the Task Force for their effort, comments and advice on the site network application process. - The Task Force acknowledged that the strength of the site network nominations submitted by the region were a result in part, of the focussed discussions held at the 4th WIO MTTF meeting in South Africa (Dec 2012). - The poster presentation in the SS7 venue lobby was a result of the work undertaken at the meeting and supported by IOSEA Secretariat.
		<ul style="list-style-type: none"> - Signatories supported the establishment of a steering committee to seek financial support for the network.
	Bycatch mitigation (document MT-IOSEA/SS.7/Doc. 10.4)	<ul style="list-style-type: none"> - Bycatch was recognised as a high priority issue in the region and signatories welcomed the proposed delivery of technical support including observer training.
	Technical Support / Capacity-building programme (document MT-IOSEA/SS.7/Doc. 8)	<ul style="list-style-type: none"> - Tanzania expressed interest in capacity building support from the Secretariat in relation to the preparation of a national sea turtle conservation strategy (priority task for national committee). - Madagascar identified the need for capacity building amongst scientific personnel involved in marine turtle conservation (Government, students, private sector).
	Standardisation / harmonisation of technical terms, protocols, methods, reporting, etc.	<ul style="list-style-type: none"> - Signatories agreed that there was a need for harmonisation of the methods and protocols used in the region to enable rigorous evaluation of population trends. - WIO MTTF Chair to circulate link to accepted IUCN marine turtle conservation methodologies to ensure protocols are followed correctly in each country.
General	<ul style="list-style-type: none"> - WIO MTTF Chair to share details with members of forthcoming meetings and conferences of relevance to the MTTF e.g. ISTS, WIOMSA. 	

Actor	Topic	Comments and Proposed Actions
Advisory Committee	IOSEA Site Network (document MT-IOSEA/SS.7/Doc. 7)	<ul style="list-style-type: none"> - Signatories recommended that the questions in the site network application form be more specific to ensure all relevant data are captured in the initial application to reduce the need for lengthy and time consuming revisions. - Countries that have already submitted an application (SA, Tanzania, Seychelles, France, Comoros) to provide feedback to the Secretariat to help improve the application process.
Secretariat	Illegal take and trade (document MT-IOSEA/SS.7/Doc. 10.1)	<ul style="list-style-type: none"> - Signatories fully support the recommendation of increased visibility of marine turtle trade issues on the IOSEA website and assistance with CITES permits. - Signatories recommended the establishment of a working group to address issues related to turtle trade.

ANNEX 4C: SUMMARY OF THE NORTHERN INDIAN OCEAN (NIO) WORKING GROUP DISCUSSIONS

MONDAY, 8 SEPTEMBER 2014

Bangladesh

Bangladesh has over 700 km of coastline facing the Bay of Bengal. Five species of turtle forage in the Bay of Bengal, but only three of them nest in Bangladesh. Among them, nesting Olive Ridley and Green turtles are common, while nesting Hawksbills are rare.

Marine turtles are protected by Environment Protection Act – 1995 and Bangladesh Wildlife Preservation Act – 2012. Under the Strengthening Regional Cooperation for Wildlife Protection Project (SRCWPP), Forest Department started Wild Life Crime Control Unit (WCCU), which allowed to recruit professional forest department officers to locate and inspect illegal wildlife materials around the country. The Bangladesh Coast Guard, Navy and customs department are in place to check the illegal trade of the marine turtle.

Major threats to turtles include shrimp hatchery development in coastal areas, which has the potential to disturb nesting habitats. Coastal developments and tourism activities also disturb turtle nesting habitats. For example, peak tourism period in Cox's Bazar coincides with the peak nesting period of Olive ridley turtles there. Threats also include stray dog predation and coastal developments (e.g. road construction).

A major turtle project in Bangladesh is the project on Conservation of Marine Turtles in Bangladesh Coastal and Marine Territory, implemented by Marineline Alliance. The project is supported by the SRCWPP and Bangladesh Forest Department with support of the US-Wildlife Service and Whitley Fund for Nature, UK. One of the major goals of the project is to identify marine turtle habitats to develop coastal and Marine Protected Area (MPA) to be managed by FD and the local community.

One of the aims of this project is also to explore sea turtle nesting rookeries along the entire coast of Bangladesh; to identify species, determine population size and seasonality. It also aims to explore migration routes, near-shore and foraging habitats, as well as the seasonality of sea turtles, and to build capacity of communities and forest officials.

Sea turtle monitoring takes place through the assistance of Marineline Alliance, which involves trained local people in the monitoring.

Bangladesh is a member of SAARC and of the FAO's BOBLME project where turtle conservation issues are being reported.

Tracking of sea turtles through satellite tracking takes place supported by Whitley Fund for Nature, and the World Bank-funded SRCWP Project for Bangladesh Forest Department. Marineline Alliance conducts surveys in the coastal areas on collecting information on turtle bycatch in fishing activities and other threats for turtles.

Maldives

Marine turtles in the Maldives are protected by a Moratorium. The second ten-year moratorium banning all forms of live turtle take or harm applies in the Maldivian EEZ. Banning on harvesting of eggs was included in the moratorium in 2007. Some 13 islands have been included in the list banning all forms of harvesting of eggs. The Marine Research Centre (MRC) of the Ministry of Fisheries Agriculture continues to be the focal point.

Progress on monitoring and enforcement is slow due to limited resources available to carry out monitoring. There is hardly any organized monitoring of nesting sites and habitats and little enforcement takes place.

The main threats are loss and/or threats to nesting beaches (islands) due to tourism, coastal development and harvesting of eggs. Increased access to uninhabited islands means there is hardly any islands not visited by humans.

There has been continued increase in interest by tourist resorts and NGOs to conduct turtle-related activities, such as establishing turtle research programs in turtle sanctuaries. These activities are regulated by a research permit from the Ministry of Fisheries and Agriculture. However, they go unmonitored and often undertake activities without permits. These facilities operate head-starting programmes for hatchlings sourced from nests on the resort itself or hatchlings bought from communities in the area. They discourage harvesting of eggs and instead they buy hatchlings at higher prices for them to be reared at the facilities for release.

Satellite tracking hasn't gone far since 2007; some data are available on websites <<http://marinesavers.com/turtle-conservation/>> Some have also started turtle photo identification programmes where tourists are encouraged to send pictures for identification. A website is maintained to report progress on identified turtles and their encounters.

The main fishing method in the Maldives is hook-and-line and there is no interaction with turtles. A small longline fishery is being developed operating on EEZ from 100 miles and beyond. The fishery is regulated and adheres to IOTC's conservations and management measures that also include measures for turtle bycatch mitigation.

An important and relevant project is the Olive Ridley Project, which primary goal is to deal with ghost nest issues. Olive Ridleys do not nest in Maldives, but entangled olive ridleys in ghost fishing nets are common in Maldivian waters. The Project <<http://oliveridleyproject.org>> attempts to document these incidences in a systematic way and educate the public on these issues. The project is being supported by the Marine Research Centre through a small grant from the BOBLME Project. Information about the project and review of the data will be reported to IOTC.

Sri Lanka

Sri Lanka has over 360km of coastline. Five species of marine sea turtles occurs in Sri Lankan waters; Green, Olive Ridley, Loggerhead, Leatherback, Hawksbill. The entire coastline is important for turtle conservation. During 1999-2000, 5,241 turtles have been recorded nesting on 16 sites.

Sri Lanka reported improvements in their conservation efforts in the recent years. Following the end of conflict in 2008, the coastline is now controlled by the navy and coast conservation department, where their efforts to monitor and enforce the turtle conservation measures are becoming more effective.

A major issue reported by Sri Lanka is turtle hatcheries being developed by private parties and NGOs catering for tourism purposes. These hatcheries where hatchlings are being reared attract tourists volunteering to help in the hatchery work. Their efforts however, are not helping to conserve the turtles; instead the hatcheries tend to incentivize the public to disturb the nests and/or remove hatchlings for sale to the hatcheries which would otherwise have naturally left to sea.

Protected Areas: Sri Lanka has 12 coastal protected areas, of which 6 were declared very recently. More than 10 percent of the coastline is contained within PAs. The plan is to protect at least 20 percent of the country's coastline.

By far the most important threat is habitat destruction, especially through the development of harbours, hotels and beach armoring. Egg collecting, poaching and bycatch in the gillnet fisheries are also threats to turtles. Many Olive ridley turtles are known to be entangled in lost nets or pieces of nets, which often act as ghost nest where turtles are attracted and become entangled. Marine debris in turtle habitats are also becoming and increasing threat to turtles.

WEDNESDAY, 10 SEPTEMBER 2014

1. Discussion of AC recommendations

Actor	Topic	Proposed Action	Remarks
Signatory States	“Overview of IOSEA MoU Implementation” (document MT-IOSEA/SS.7/Doc. 6)	Provide feedback on the points in the table in Part I: 1. Descriptions of exemplary approaches; 3. Adverse incentives; 14. Critical review of management programmes; 20. Analysis of international flipper tag data; 24. Species assessment (for green turtles); 26. Standardisation/ harmonisation of methods; 27. Review of education/ awareness initiatives; 28. Alternative livelihood opportunities; 36. Training effectiveness and synergy [6].	No major comments. Adequately captured the items from the national reports of IOSEA signatories. NIO countries feel there may be some areas that have been missed in completing the national reports. Need for timely and/or regular updates of national report are required to keep information up to date. NIO countries feel that educational and existing programmes in the countries are not adequately reflected – in part because of incomplete national reports available to the Secretariat.

Actor	Topic	Proposed Action	Remarks
Signatory States	Collaborative research and management	Data collection should be intensified through regional collaboration, and technical support offered to less developed countries, as well as through partnerships with five recognised genetics laboratories [7].	Unlike in the WIO, there is little activity inter-sessionally in the region. It is proposed to have a sub-regional meeting on turtle issues as a high priority. Areas that may be addressed are genetic work, and Casuarina issues (India). Oliveridely Project <based in Maldives/Sri Lanka> can be a driver for such a meeting – monitoring of incidence of turtle entanglement in ghost nets; standard approaches of data collection.
		Genetics work could be linked more closely with the Species Assessments and the Site Network process, which could help to identify index beaches and priority foraging areas [7].	Endorse this – this would save resources and time.
	Identification of genetic characteristics of the nesting populations (document MT-IOSEA/SS.7/Doc. 10.2)	Signatory States should prioritize which genetic stocks need identification at nesting and foraging areas and, where possible, on the high seas; [8] The species assessments & site network process should inform the prioritization of genetic analysis of populations [8].	Given that there are other efforts elsewhere to work on Hawksbill and Leatherback, IOSEA's efforts identifying stock structure through genetics may be focused on hawksbill turtle.
	Leatherback Assessment (document MT-IOSEA/SS.7/Inf.10)	Consider four actionable project concepts proposed by the AC [10]: In Sri Lanka, where monitoring and sampling is needed; In places where there is egg relocation and hatcheries (particularly in Malaysia and Thailand); in places where coastal management practices (e.g., dune stabilization) are of concern; In Indonesia, where there is poorly documented widespread, low density nesting (Annex 4).	In Sri Lanka loggerheads are the second most common species and require working out the nesting activities in the eastern and western sides.

Actor	Topic	Proposed Action	Remarks
Signatory States	Loggerhead assessment (document MT-IOSEA/SS.7/Inf.11)	Consider three project proposals from the AC [10]: Elucidate hatchling production rates and post-hatchling dispersal in the Indian Ocean Elucidate nesting activity on Socotra Island (Yemen), mainland Oman, and Sri Lanka Elucidate vulnerability of nesting beaches in the IOSEA region (Annex 5)	
	IOSEA Site Network (document MT-IOSEA/SS.7/Doc. 7)	Engage in a constructive discussion at the SS7 Meeting of the challenges faced by Focal Points in meeting their collective commitments [13].	Due to lack of resources, and simply to lower priority given to turtle issues in the Ministries (for the case of Maldives).
		Undertake, with support of mentors from the AC, any necessary revision of their proposal, during or after the Signatory State meeting [17].	Endorses the work. Some procedure may be developed for timely communication between the AC and proponents to ensure revisions are complete and satisfactory to AC within the agreed 6 month deadline.
		Periodic review of Network Sites: It was proposed that this discussion, including consideration of a reporting template for network sites, be taken up at the next Meeting of Signatory States (SS8) [18].	This is good idea as this would facilitate standardized reporting.
		Signatories proposing sites with small but significant nesting populations (in terms of management units) should invest efforts in developing complementary arguments to justify the inclusion of such sites in the IOSEA Site Network [19].	Agreed – this may be important in some cases. Small populations may not necessarily mean not important – they could mean separate management units.
		Engage actively in the establishment of a steering committee to seek financial support in the months following the meeting [21].	Endorsed.

Actor	Topic	Proposed Action	Remarks
Signat- ory States	Bycatch mitigation (document MT- IOSEA/SS.7/Doc. 10.4)	Observer from the United States offered to investigate, within her own organisation (NOAA), the possibility of collaborating with IOTC/IOSEA in delivery of technical support, such as marine turtle-related observer training [22].	Maldives, Sri Lanka, Indian, Pakistan are members of IOTC and they have requirement for reporting turtle bycatch. These training will be helpful in such work. IOSEA or members want to suggest/recommend to IOTC about this possibility to arrange piggy-back on existing capacity building workshops.
		Begin addressing by-catch issues in the countries and locations that are identified as priority areas in the species assessments [23].	Can address the issues in the proposed workshop.
	Technical Support / Capacity-building programme (document MT- IOSEA/SS.7/Doc. 8)	The sub-regional consultations of the Meeting of Signatory States would be an appropriate forum for identifying technical support / capacity-building needs in IOSEA Signatory States [27].	Hatchery management and bycatch; project under species assessment.
	Standardisation / harmonisation of technical terms, protocols, methods, reporting, etc.	Any data collection project conducted in the region should report rigorously on the methodology followed, whatever the method chosen among the many options available [29].	Was found to be very important given that IOSEA is starting to establish site networks.
Advis- ory Com- mittee	Illegal take and trade (document MT- IOSEA/SS.7/Doc. 10.1)	Give more consideration to the issue of marine turtle poaching and trade in the Site Network proposal evaluation process (e.g. to request more explicit mention of turtle exploitation and poaching in the section pertaining to threats affecting marine turtles in the vicinity of the site, and to revise the evaluation criteria accordingly) [9].	This will also strengthen the site network.
	Leatherback (document MT- IOSEA/SS.7/Inf.10) and Loggerhead (document MT- IOSEA/SS.7/Inf.11) assessments	The next IOSEA assessment should focus on hawksbill turtles. Drs.Limpus, Hamann and Miller volunteered to form a committee to take the work forward intersessionally [11].	

Actor	Topic	Proposed Action	Remarks
Advisory Committee	IOSEA Site Network (document MT-IOSEA/SS.7/Doc. 7)	‘Mentors’ from among the members present for each Site Network proposed, to provide feedback to proponents to help them strengthen their proposals during and/or after IOSEA SS7. <i>(Advisory assistance should be offered to proponents during the completion phase of the Site Information Sheets, but such “pre-submission” mentors should serve only as resource persons and not be involved in the writing of the proposal.)</i> [15].	NIO group endorses the proposed site network with suggested AC actions. i.e., sites which are not up to standard, proponents to work with the mentors to improve in the suggested areas. NIO group fully endorses the evaluation framework including allowing for Philippines proposal to be accepted with AC’s preliminary findings.
		Enhance IOSEA’s involvement in by-catch mitigation efforts, for instance by contributing papers to the IOTC’s Working Party on Ecosystems and Bycatch (WPEB) [22].	NIO members to pay particular attention to attending WPEB and take turtle issues. Members liaise with the IOSEA in developing proposal for IOTC Commission.
	Bycatch issues (document MT-IOSEA/SS.7/Doc. 10.4)	Consider favourably IOTC requests for technical advice, subject to financial support and availability [22].	Yes – fully endorses this recommendation
	Technical Support / Capacity-building Programme (document MT-IOSEA/SS.7/Doc. 8)	Site Network mentors to help proponents identify where the IOSEA Technical Support / Capacity-building Programme could address training needs at their site, as well as help articulate more precisely their actual resource requirements [26].	Fully agree.
		Recognise and give credit to the training programmes already existing throughout the IOSEA region and to support these, through promotion of greater collaboration throughout the region [27].	OK
		Propose options to Signatories where they were needed and requested [27].	Yes

Actor	Topic	Proposed Action	Remarks
Advisory Committee	Standardisation / harmonisation of technical terms, protocols, methods, reporting, etc.	Take note of discrepancies or inconsistencies observed in the descriptions provided in Site Network proposals being reviewed [29].	Fully endorses this.
		A glossary of standardised terms might be prepared for inclusion in the IOSEA website. Keep this issue under review [29].	Fully endorse this.
	General	Make use of and inter-link IOSEA initiatives, such as site-based information, species assessments, and site network proposals [31].	Fully endorses this.
		Recognise the common lack of basic information and insure the availability of up-to-date, credible information [31].	Endorse this.
		Ensure that spatial, temporal, and organisational/institutional scales are clear; strive for quality control [31].	Endorse this activity.
		Promote and optimise cooperation at various levels (local, national, bi-national, sub-regional, regional, and beyond) – for example, with the Indian Ocean Tuna Commission [31].	Except Bangladesh all NIO members are also full members of IOTC. It is suggested to participate in IOTC meetings to promote the cause of turtles in respective meetings, and to communicate issues with Secretariat and others for information.
		Follow-up on and evaluate various initiatives; show-case the relevance of IOSEA initiatives to those of other programmes [31].	
		Involve a responsive Advisory Committee in advising at various levels of IOSEA initiatives [31].	
	Potential, future workshop on predation issues [31].		
Secretariat	Help identify genetic characteristics of the nesting populations	Assist countries with contact addresses for applying for CITES permits [8]; The Advisory Committee will assist Signatories with contacts for laboratories specializing in sea turtle genetics [8].	This will be useful to facilitate permits. Endorsed.

Actor	Topic	Proposed Action	Remarks
Secretariat	Illegal take and trade (document MT-IOSEA/SS.7/Doc. 10.1)	Try to raise the profile of marine turtle trade issues among intergovernmental organisations / networks that focus on other aspects of wildlife crime and to collaborate more closely with CITES, ASEAN-WEN and TRAFFIC [9].	The NIO Group endorses this action to be done by the Secretariat.
		Give more visibility to marine turtle trade issues on the IOSEA website, for example by posting announcements on meetings organised by CITES and TRAFFIC, and featuring exemplary legislative and enforcement actions carried out by Signatory States [9].	
		Update the existing paper, which could serve as an entry point to the topic, and submit it to CITES COP17, to be held in South Africa in 2016 [9].	Yes – the Group endorses this work.
		The observer from the United States noted that the Secretariat of the Inter-American Sea Turtle Convention was already collaborating closely with CITES; a joint approach with IOSEA could be productive [9].	
	Leatherback (document MT-IOSEA/SS.7/Inf.10) and loggerhead (document MT-IOSEA/SS.7/Inf.11) assessments	Seek funding from other partner organisations such as NGOs [10].	Fully endorses this activity.
IOSEA Site Network (document MT-IOSEA/SS.7/Doc. 7)	Site Network information materials such as the template, evaluation criteria and website page might benefit from repackaging as to make them more attractive to potential donors [16].	Agreed.	

Actor	Topic	Proposed Action	Remarks
Secretariat		The Secretariat reiterated its commitment to undertake editorial revisions of the submitted proposals to correct linguistic or organisational deficiencies, without affecting their substance, prior to their publication on the IOSEA website [16].	This will be helpful as most of members are not native English speakers.
	Bycatch issues (document MT-IOSEA/SS.7/Doc. 10.4)	Improve the visibility of by-catch issues by making use of opportunities offered by the IOSEA website. This could be achieved by adding a section on by-catch on the home page (including an updated version of Doc 10.4.) and linking to relevant videos and other information material produced by other organisations (for example in Australia and the United States) [24].	
	Standardisation / harmonisation of technical terms, protocols, methods, reporting, etc.	Supplement the existing links to various conservation/management manuals already contained in the Electronic Library of the IOSEA website [29].	

2. Discussion of AC Site Networks recommendations

AC Site Network Recommendations: there is no site network proposal from the region. It was agreed that work needs to be done in collaboration with the AC towards preparing proposals from the region. **Maldives is likely to face challenges due to unique setup and location of the nesting sites.**

NIO group endorsed the AC recommendations of the suggested evaluation framework for Site Network proposals as is (with those 5 evaluation categories). For the proposal requiring additional work and improvements it was suggested to develop a time-bound process for the mentors and proponents to work in the suggested 6-month time frame.

3. Drafting of a sub-regional programme of work for inclusion in the 2014-2016 IOSEA work plan

- NIO appears to be little less dynamic than other areas. To address this it is proposed to have a **sub-regional workshop(s) to address turtle issues**. The workshop would have to address current issues in the region; **stock identification, on-going projects, way of developing synergies between countries**, and to develop support for the submission of Site Network proposals.
- Work on identifying management units (based on genetics in the area). Given that there are other efforts elsewhere to work on Hawksbill and Leatherback, IOSEA's efforts identifying stock structure through genetics **may be focused on hawksbill turtle**.
- Except for Bangladesh all NIO members are full-members of the IOTC where fishery interaction and bycatch reporting of turtles are mandatory under their IOTC's Conservation and Management Measures. **Capacity-building on proper recording of turtle interaction in harmonized and standard way is important**. This may be linked #1 (sub-regional workshop)
- Olive ridley Project has been working in the Maldives. Currently Maldives, through BOBLME Project is supporting them to review the existing information (sighting of turtle entanglements in ghost nets) to be reported to IOTC WPEB. **Support for capacity building and/or creating awareness of fishermen and NGOs working in the area is important to continue to gather this important information on turtle entanglements**.
- It was **agreed to support project concepts for leatherbacks in species assessment document** (MT-IOSEA/SS.7/Doc. 9) to devise a low-cost monitoring protocol, to identify and monitor index sites consistently for a period of 3-5 years in Sri Lankan leatherback rookeries, and to collect genetic samples as a contribution to a region-wide assessment. Seek to find possible collaborates as suggested.
- **Encourage and develop synergies with the NGOs working in the countries**. For example IUCN in Maldives is working on a Proposal for a Citizen Science-based Maldives Turtle Monitoring Program.
- IOSEA – help develop **Executive Summaries of Turtles for the IOTC**. Now with Dr Jerome Bourjea (Chair of WPB in IOTC) being a member of IOSEA AC, this process will be much easier.
- Except for Bangladesh, all NIO members are also full members of IOTC. **It was recommended that members (national focal points) help and coordinate their contributions on turtle issues to national scientists and national delegations attending IOTC**.

ANNEX 4D: SUMMARY OF THE NORTHWEST INDIAN OCEAN (NWIO) WORKING GROUP DISCUSSIONS

MONDAY, 8 SEPTEMBER 2014

1. Brief (up to 5 min.) country presentations highlighting key activities undertaken since Jan. 2012

Jordan

Administration/Legislation

- National Strategic Action Plan is in place – with the support of PERSGA.
- A new NGO has been established devoted to turtle conservation. The President of the new NGO expressed interest to attend the meeting.

Protected Areas

Extensive work has resulted in the establishment and monitoring of a coastal protected area (7km zone) which includes zones of multiple use and a 1km zone along the coast restricting activities.

Research programmes

- Foraging sites in collaboration with diving clubs;
- Research on population distribution in the Gulf of Aqabah (results to be published).

Awareness initiatives

In collaboration with the Marine Park Authority several workshops and awareness campaign (brochures).

Oman

Administration/Legislation

- National Committee for sea turtle conservation involving all government agencies (Chair MECA): Ministries of Tourism, Interior, Agricultural and Fisheries, Sultan Qaboos University and Environment Society of Oman (NGO)
- Technical Team for the IOSEA Site Network Nomination chaired by Ali Al Kiyumi
- More funding was secured towards turtle conservation
- New ranger units have been established and 22 new tourist guides in visitor centers engaged.

Protected areas

2 new protected areas:

- Masirah Island
- Bar Al Hikman

Research and monitoring programmes

- Collaboration with EWS-WWF regional satellite project and participated in the workshop held in April 2014
- Sultan Qaboos University and Nizwa University: scientific papers included in the national report
- Completed gap analysis and priorities on turtle conservation

Interesting findings

- Satellite tracking project with EWS-WWF: hawksbill turtle foraging areas on the SW of Masirah Island.

Sudan

Research programmes

Little is known regarding the relative importance of nesting sites and breeding rookeries in Sudan: Preliminary surveys on Seil Ada Kebir Island (1980), Study submitted to PERSGA on nesting site on DOUNGAB Bay and 4 offshore islands were surveyed (2003).

Research findings

Along the coast scattered nesting occurrences. Important nesting sites: (1) Megarsam island; (2) Hindi Gidir Island; (3) Sagale Island; (4) Hisout Island.

United Arab Emirates

Administration/Legislation

- Improved coordination among Federal Authority, Ministry of Environment and local authorities at Emirate Level
- In addition to existing laws for the protection of environment (Law 23 and 24), new ministerial decrees came into force regulating overall fishing activities.

New protected areas

- In addition to existing MPA in Abu Dhabi (Marawah Biosphere Reserve), 3 new protected areas were established:
 - o Ali Yasat (Marine Protected Area)
 - o Sir Bu Nair (Ramsar Site, on the nomination list of UNESCO Site)
 - o Khor Khalba (Ramsar Site).

Research and monitoring programmes

- Collaboration with EWS-WWF and other countries in the region to identify important foraging sites for hawksbills. Attended EWS-WWF regional workshop (April 2014).
- Abu Dhabi continuous monitoring programmes on 7 islands (key nesting sites), Sharjah monitoring nesting beaches (Sir Bu Nair Island) and continuous collection of DNA, flipper tagging.

Interesting findings

- Gulf Satellite tracking project:
 - o (1) hawksbill turtles do not migrate outside of the Gulf;
 - o (2) Important foraging areas have been identified.
- Tag returns: confirming remigration period of 2-3 years.

Yemen

Administration/Legislation

- Collaboration with NGOs and Abdul Karem Nasher (Sana'a University);
- National Strategy and collaboration with PERSGA.

Research

NGO involved volunteers from local communities and fishermen to monitor nesting activities.

2. Present status of fisheries interacting with marine turtles

2.1. Current situation at country-level

Jordan

Fishing is restricted close to the littoral zone along the newly established MPA and most fishing occurs further offshore

Oman

- Ministry of Fisheries is a member of the Turtle Conservation National Committee;
- Laws regulating fisheries: nets and seasons. Rangers from the Ministry of Fisheries are monitoring fishing activities (fisheries resource perspective).

Sudan

Department of Fisheries and Protected Areas Authority are responsible for regulation of fishing activities within MPAs.

United Arab Emirates

- Little coordination with fisheries regulatory authorities to consider turtle conservation priorities;
- Ministerial decrees are in place to regulate fishing gear specifications (mesh size of nets), as well as time restrictions for fishing in certain areas;
- Strandings of dugongs and turtles are being investigated: Abandoned and illegal nets are thought to be the main cause of incidental capture.

Yemen

An NGO is providing a mechanism for coordination between fishermen and communities involved in turtle monitoring programmes with government authorities.

2.2. Regional needs

- By-catch threat is not properly assessed in the region and it is considered of high priority. A research programme is required to investigate potential overlaps of fishing activities and turtles/dugongs distribution.
- A regional capacity building workshop is needed to initiate a coordinated effort in the region with the involvement of key government authorities (including ministries of fisheries).
- As a second step, it was recommended that national workshops to be held to address country specific issues and work with fishermen associations and communities.
- 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.
- Some countries reported that Environment Departments maintain good relationships with fishermen associations as part of ongoing work on fisheries management. Additional work to assess by-catch issues needs to be carefully introduced and communicated to fishermen communities as it might create suspicion and add bias on the fishermen responses.

3. Issues/problems concerning illegal take and trade in marine turtles

The consumption in the NWIO countries is mostly associated with cultural and traditional practices. The following types of consumption tend to occur mostly in the region: egg collection (used for camel feeding and human consumption), hatchling collection, meat consumption.

- **Regional scale:** It is not considered a widespread phenomenon and it is agreed that it is Low Priority for the region (and Data Deficient).
- **Country level:** Community engagement to focus on specific areas / needs where local consumption occurs

4. Coastal development issues

- ICZM is a key process to incorporate turtle conservation needs into planning.
- Key emerging/growing pressures: nuclear plant posing critical threats on important habitats such as sea grass and coral reefs (United Arab Emirates), Desalination infrastructure development and effluent, Harbour development and dredged channels, Industrial effluent & water pollution, Light pollution (Tourism development & Industrial activities).
- Countries would require recommendations by the IOSEA Secretariat on how turtle conservation priorities can be integrated into the EIA process.

5. Future / planned national activities and opportunities for sub-regional collaboration

- PERSGA is an active regional initiative providing coordination opportunities for countries in the Red Sea. Manuals are available on data collection protocols that can help with standardization of methods.
- By-catch assessment projects to be launched in the United Arab Emirates would benefit from regional collaboration.
- Following a recent regional workshop hosted by EWS-WWF, regional collaboration can be facilitated by international/local NGOs.
- Email '*listserve*' can be a simple method for exchange of information among experts in the region. This could potentially be facilitated by the Sub-regional focal point but additional work needed to maintain this should be considered.

6. Use of, and contributions to, various IOSEA Online Tools

- On-line tools are not used widely but there are intentions to use them in the future
- Satellite telemetry metadata are included into the IOSEA database.
- IOSEA On line reporting mechanism to consider new tools to allow flexibility and to incorporate changes/revisions – Consider options currently available with CMS.
- Summary report options to be demonstrated to Signatory States, as well as training to be considered.

7. Reporting on marine turtle conservation activities/developments of other relevant organisations

Countries that are members of IOTC would look into ways to support IOSEA on this task.

8. Details of planned meetings, workshops of possible relevance to other countries

- Regional EBSAs identification process (CBD) to be held in Dubai in 2015: Countries will be requested to provide relevant scientific information.
- International Sea Turtle Symposium (Spring 2015) to be held in Turkey.

9. National / sub-regional Focal Point responsibilities (& representation through IOSEA SS9) – Doc.12

10. Any other business (e.g. advanced discussion of particular agenda items, such as 7a, 7b, 8b, 8c etc.)

N/A

WEDNESDAY, 10 SEPTEMBER 2014**11. Discussion of any other priorities / way forward, in the respective sub-regions with regard to:**

- a. Illegal take/trade (Doc. 10.1)
- b. Genetic Stocks (Doc. 10.2 + draft AC report circulated Tues PM: para. 8)
- c. Socio-economic / human dimension (Doc. 10.3 + Addendum)
- d. Fisheries-turtle interactions (Doc. 10.4)
- e. Technical Support / Capacity Building (c.f. AC presentation)
- f. Species Assessments – Project concepts (draft AC report, Annexes 4+5)

Discussion notes are covered under the points above and incorporated into the workplan as relevant.

12. Discussion of recommendations/ideas contained in the draft AC report

Species assessment – hawksbill & greens are of priority for the region. Other recommendations are captured in the workplan below.

13. Discussion of AC Site Network recommendations relevant to the sub-region

- The Subregional group accepts AC recommendations and understands that nominating countries will be working with the AC and assigned mentors to amend proposals (pending plenary decisions).
- The Subregional group recommends that other countries to nominate sites before the next SS meeting.

14. Drafting of a sub-regional programme of work for inclusion in the 2015-2017 IOSEA work plan

Topic	Proposed Action	Actor	Timeframe
Fisheries Interactions In response to the NWIO Sub-region's request at the SS7 meeting, IOSEA to initiate capacity building workshop on by-catch assessment methods and engagement strategies with key stakeholders.	Workshop Concept Note and formal proposal to be prepared and sent to potential hosting countries with associated technical requirements and associated budget.	IOSEA Secretariat	2015
	Government and NGOs in the region to investigate potential opportunities for regional capacity building workshop and the role that each party can play.	NWIO Subregion SS	2015
	Dedicated discussions and workshops to address specific issues at country level will need to be considered following regional capacity building workshop.	NWIO Subregion SS	TBD

Topic	Proposed Action	Actor	Timeframe
Fisheries Interactions Information sharing	By-catch assessment project (Abu Dhabi and potentially United Arab Emirates) – Findings and methods to be shared with other SS parties.	United Arab Emirates	TBD – Project to commence in 2015
	Sharing of methods and lessons learnt from current studies on fisheries interactions.	Oman	2015
Fisheries Interactions Coordination with IOTC	Signatory States that are members of IOTC to support IOSEA's work/coordination with IOTC.	NWIO Subregion SS - members of IOTC	TBD
Coastal Development IOSEA to provide support and recommendations to Signatory States on the importance of the EIA process to integrate sea turtle conservation	Consider incorporating progress updates on EIA implementation into national reporting and possibly carry out analysis on how EIA processes are implemented in each country.	IOSEA Secretariat	Inter-sessional
Genetic research / Species Assessment	Countries to incorporate genetic sampling into their ongoing monitoring activities (subject to budget and resources available).	NWIO Subregion SS	Inter-sessional
	Provide guidance on collection protocols, CITES permits, and laboratory selection.	IOSEA Secretariat and AC	2015 (and upon additional request)
	Identify needs and opportunities for regional analysis to inform stock assessment.	IOSEA Secretariat and AC - in coordination with the Subregional Focal Point	Inter-sessional
	Scope of the project recommended for loggerheads in the region (following species assessment) to be communicated to the concerned SS.	IOSEA Secretariat and AC	2015
Socio-economic studies	Socio-economic survey on fishermen carried out by United Arab Emirates' Environment Agency Abu Dhabi (EAD).	EAD to share methods and lessons learnt with the rest of NWIO Subregion SS	Inter-sessional

Topic	Proposed Action	Actor	Timeframe
Capacity Building	By-catch assessment.	As above	As above
	Turtle Biology – standardisation of data collection and protocols: Identify current challenges/gaps and explore opportunities for potential regional training and further coordination.	Sub regional Focal Point in coordination with IOSEA Secretariat and AC	Inter-sessional
Site Network	Site Network training and management.	Will be covered by each nominating country in coordination with IOSEA Secretariat and AC mentors	Inter-sessional
IOSEA website and tools	Training or webinar to be considered and reach SS for any further technical help to submit national reports.	IOSEA Secretariat	Inter-sessional
	Consider updating existing online reporting tool (potentially to be integrated with other CMS tools).	IOSEA Secretariat	Inter-sessional

ANNEX 4E: SUMMARY OF THE SOUTH-EAST ASIA (SEA+) WORKING GROUP DISCUSSIONS

MONDAY, 8 SEPTEMBER

Australia

1. Brief (up to 5 min.) country presentations highlighting key activities undertaken since Jan. 2012

Recovery plan was reviewed and determined to require to be remade.

Key impacts identified for marine turtles (in the 2003 recovery plan), included fisheries bycatch; marine debris; domestic and international harvest; shark control activities; boat strike; pearl farming and other aquaculture activities; and defence activities.

A review of the 2003 plan found that many management actions have been identified and implemented, resulting in a reduction of some of the above listed impacts to turtle stocks. Particularly around fisheries management and shark control.

Despite an improvement, it noted that in all cases there were still opportunities to build on programs currently in place.

The review identified emerging issues, such as noise, particularly industrial noise, such as seismic surveys and pile driving, required additional focus in a new recovery plan, and other contemporary threats that had not been addressed in the 2003 Plan.

- Public consultation Q1 2015;
- 3 month comment period;
- Endorsed plan by the end of 2015.

Election commitment towards turtles and dugongs

- The Dugong and Turtle PP was one of three components of a larger election commitment. The scope encompasses Far North Queensland and the Torres Strait. \$5M has been secured for delivery of the Plan through the Reef Trust. The Dugong and Turtle Protection Plan is a component of the Reef 2050 Plan. Implementation will commence from 1 July 2014 for three years.
- \$2M will build on compliance and enforcement certification already provided to rangers;
- \$2M for an Australian Crime Commission investigation into illegal poaching and transportation of turtle and dugong meat;
- Tripling of penalties under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act). Again only focusing on illegal aspects of this activity;
- \$700,000 toward marine debris clean-up initiatives under the Reef Trust mostly focused on GBR;
- \$300,000 to support for the Cairns and Fitzroy Island Turtle Rehabilitation Centres;
- A *National Protection Strategy for Marine Turtles and Dugong*, including an updated Recovery Plan for Marine Turtles of Australia and other policy documents under the EPBC Act; and

- Working with Indigenous leaders towards an initial two-year opt-in no take of dugongs and turtles. Discussions have begun and it is likely that mechanisms used will be agreements such as TUMRA's under the GBRMP Act.

Loggerhead single species action plan

Following a technical meeting in Brisbane, Australia in March 2014, a Single Species Action Plan for the loggerhead in the South Pacific Ocean has been prepared in cooperation with range states and experts and with financial support from the AG. This plan was presented at CMS Scientific Council 18 (Bonn). This plan focuses on loggerheads in the South Pacific Ocean, and the decline in returning large immature, believed to be associated with by-catch in longline fisheries and ingestion of plastics.

Genetic work (agenda 8c Doc 10.3)

Done by Dr. Nancy FitzSimmons and Dr. Col Limpus, determining ten GT stocks as opposed to nine. Has implications for the development of the recovery plan and how we determine management actions etc.

The Australian Government's Marine Bioregional Planning Program

- In 2012, Australia met its international and national commitments to establish a National Representative System of Marine Protected Areas (NRSMPA) by 2012 through the establishment of 40 new Commonwealth marine reserves under the *Environment Protection and Biodiversity Conservation Act 1999*. These new reserves added more than 2.3 million square kilometres to the former national system of Commonwealth marine reserves and expanding Australia's marine protected areas in Commonwealth waters to 60, covering some 3.2 million square kilometres (including the Great Barrier Reef Marine Park). This is the largest representative network of marine protected areas in the world. State and the Northern Territory governments also have marine protected areas within their coastal waters under their own legislation and processes as part of the NRSMPA.
- The Australian Government has developed marine bioregional plans under the EPBC Act. The Plans identify conservation values, pressures on those values, priorities for management and guidance on avoiding impact (see www.environment.gov.au/mbp). One important element of these Plans is the identification of biologically important areas for over 66 different marine species, including marine turtles. A web-based tool is available through the Plans that identifies what areas are important for different behaviours, such as nesting, feeding and inter-nesting activity. Guidance is provided on what actions represent greater risk of impact to marine turtles. This improved spatial information assists developers avoid and mitigate impacts to marine turtles. This tool is available at www.environment.gov.au/cva.

2. Present status of fisheries interacting with marine turtles

In Australia, there has been considerable effort on the mandatory use of TEDs across all trawl fisheries; and the use of de-hookers and line cutting kits on longlining vessels. There are a variety of mechanisms through which fisheries bycatch is reported.

3. Issues / problems concerning illegal take and trade in marine turtles

Part of the election commitment was that Australia will undertake an investigation into the question of whether there is an illegal take and trade of turtle in Australia.

The development of the remade recovery plan is currently considering illegal take and is in the process of refining this information through its Indigenous community consultation process. There are sensitivities associated specifically with any discussion on illegal direct take.

4. Coastal development issues

Any new coastal development with impacts on turtles: Abott Point.

- Lots of urban developments along the coastline of north east Australia.
- NT is being opened up for more mineral exploration and some of these activities are looking at shipping directly out of Gulf of Carpentaria, etc. as options.
- WA continues to expand offshore gas exploration and extraction.

5. Future / planned national activities and opportunities for sub-regional collaboration

Qld government has received funding for the planned improvement of Raine Island to create nesting habitat for the southern GBR green turtle stock which has seen dramatic declines in its population. This is a collaboration between Industry, Commonwealth and state.

Raine Island

- AG has provided more monetary funding (\$400,000) toward the Raine Island initiative.
- The money is being directed toward management and rehabilitation measures to ensure successful nesting on the island.

Recovery Plan - MT

- Workshop was held in February 2014.
- Began Indigenous Consultation process at National Symposium in August 2014.
- Department proposes to run regional workshops to ensure greatest number of representative groups can be present.

Nest to Ocean

- On 19 February a statement was issued by Greg Hunt and Steve Dickson MP (Qld Min for NPs, Recreation and sport and Racing), announcing the joint commitment to target feral pig predation on turtle nests. Both governments are committing \$3.5 toward it.
- 4 key target areas have been identified: western CYP, eastern CYP, central Qld and southern Qld.
- We hope to start delivering the money in the next short while, but still negotiating the how and what with Qld.

6. Details of planned meetings, workshops of possible relevance to other countries

- Department proposes to run regional workshops to ensure greatest number of representative groups can be present.
- Australia just had its National and WA turtle symposium which Douglas Hykle attended.
- Western and Central Pacific Fisheries Commission Technical and Compliance Committee (TCC) 25-30 Sept 2014. WCPFCTCC will review the CMM 2008-03 Sea Turtles during the meeting (5 species covered in the plan).
- The Secretariat of the Pacific Regional Environment Programme (SPREP) is meeting on 30 Sept to 2 Oct 2014. Members will be asked to formally endorse the measures identified in the Marine Species Action Plan. Actions 3.4 and 3.5 discuss the threat of legal and illegal take of MT.
- Australia is a member of three tuna RFMOs, all of which are known to impact on marine turtles:
 - o Indian Ocean Tuna Commission (IOTC)
 - o Western and Central Pacific Fisheries Commission (WCPFC)
 - o Commission for the Conservation of Southern Bluefin Tuna (CCBST)

Additional to the report from Australia, Dr. Limpus provided the information below:

Work in progress on extreme weather 2010/2011 floods, 2012 floods category 5 cyclones.

Modelling of deaths associated with impacts of river runoff, temp changes, showing an intense pulse of deaths about one year later for juveniles and a decline in fecundity about 18 months later.

Thailand - studies on rivers and coastal temps and comparing that to hatchling rates.

Cambodia

- Have studies on nesting sites and species composition, mostly focused on nesting sites.
- Studying deeper on law enforcement, quick note to the island
- Reports from fishermen and the divers, reports of sea turtle sightings? Finding that reporting is better from diving shops over fishermen.
- Western studies provide information on sea turtles.

Myanmar

1. Brief (up to 5 min.) country presentations highlighting key activities undertaken since Jan. 2012

- 2008 nesting data identified >10 nesting sites, which makes it a major site in Myanmar for OR. Following cyclone nesting areas were lost. Currently people are collecting the eggs and taking them back to hatcheries for incubating. This is resulting in a 75% success rate.
- Department of fisheries - June 2011 fisheries new turtle island, but staff is not permanently based there. Fishing activities — gill nets.
- Discuss with state government (Bay of Bengal) new management guidance and procedures. Producing pamphlets and brochures.
- Records have declined from 200/night down to 50 over the entire season (Olive Ridges); only tens of green turtles nesting.

2. Present status of fisheries interacting with marine turtles

- Fisheries: mortality with trawl and net.
 - o Large trawl fishery. Illegal trawl fishers from Thailand, small fishermen.
 - o Gill nets are used in coastal areas, if turtles are caught alive they get sent back (to where?)
- Want to/are developing?? a standardised guide for fishery activities Mesh size regulation for gill nets
- Ghost nets are a threat – Ei, Eo, Cm
- OR, HT, GT juvenile get caught in nets
- Working on education and outreach to fishermen.

3. Issues / problems concerning illegal take and trade in marine turtles

Illegal trade is reducing tag information, but overall is not considered an issue

4. Coastal development issues

Have control on land but not in water

Sthn Myanmar - port development currently stopped?

5. Future / planned national activities and opportunities for sub-regional collaboration

Would like to study olive ridley genetic stocks, request sat tags for green turtles;

6. Use of, and contributions to, various IOSEA Online Tools

Tag report in IOSEA, tag recovery occurring mentioned in detail in the report.

7. Reporting on marine turtle conservation activities / developments of other relevant organisations

Myanmar received tags from SEAFDEC, but it is not clear what was the follow-up — need donor support to continue to work on sea turtle conservation. Illegal trade takes satellite tags. Activities in BOBLME. And reporting to SEAFDEC.

8. Details of planned meetings, workshops of possible relevance to other countries

Need donor support to run workshops on illegal trade, invite police from each country.

Philippines**1. Brief (up to 5 min.) country presentation highlighting key activities undertaken since Jan. 2012**

- Strengthened enforcement – Philippine group on Ivory and trade.
- Moratorium on 17 areas (partnerships), marine turtle sites managed by NGO partners.
- MoU with local governments.
- Have gazetted 34 marine protected reserves.
- Northern area managed.

2. Issues / problems concerning illegal take and trade in marine turtles

- Since January 2012-2014, there have been 16 confiscations.
- Of the investigations conducted, most involved jailing Vietnamese/Chinese nationals. 2 Vietnamese people were caught in vessel with Malaysian flag, cases are under investigation.
- There have been 3 prosecutions and only six cases not filed; nine are pending.
- 10,000 eggs were seized on one boat.
- Fishermen illegally entering waters are known to shut down their GPS and then they can't be traced.
- Partnerships with law enforcement agencies local and community.
- US fish and wildlife service exchanging knowledge and analysis of specimens. Wildlife trade MoU Signed in May 2014?*

Philippines Question: what happens to countries that are not living up to their MoUs?

Internet wildlife trade is a big concern, and very difficult to manage. Black market dealers even have underwater cages full of sea life being maintained to meet demand as it arises.

3. Reporting on marine turtle conservation activities / developments of other relevant organisations

- The US provides support through workshops. There is a general concern that there is no follow-up from these workshops. Particularly, there are multiple workshops that have the same aim, and such overlapping calls for more coordination between countries perhaps*
- Has identified a need to work more closely with CITES.
- Established partnerships with other agencies — 1400 wildlife enforcers nationwide.
- USFWS/BFAR agreement on DNA/Wildlife Forensics — will be sending specimens, capacity building and wildlife forensics.

Thailand

1. Brief (up to 5 minute) country presentations highlighting key activities undertaken since 2008

- There was mention of a turtle sanctuary.
- Satellite tracking 90 PPT Yemen and Gulf of Thailand - tracking migration down to the coral triangle.
- The genetic work is contrasting with the satellite tracking? At the two most important nesting sites.
- Working with local communities on protection strategies not yet implemented; needs coordination from Commonwealth agencies.
- There has been an observed decline in nesting over the last 16 years – similar to Myanmar and Indonesian statistics.
- National Plan action under development.

2. Present status of fisheries interacting with marine turtles

- Necropsy of strandings caused by fishing gear (70%) gill nets (16%). Going back over the last 15yrs of data.
- In the last 6-7 years, 15% of strandings were due to marine debris (ghost nets).
- Consequently Thailand is devising a management campaign to look at the source and the types.

3. Issues / problems concerning illegal take and trade in marine turtles

Nesting sanctuary operated by the government; illegal trade low percentage; might be caused where turtles lay eggs in some villages. It is recognised that when nesting occurs in front of villages, the villagers will take eggs and adults.

4. Coastal development issues

4 species are known to nest: green, hawksbill, leatherbacks and olive ridleys. 2 species, namely the leatherbacks and olive ridleys, are more at risk as their nesting areas are populous coastal areas.

5. Future / planned national activities and opportunities for sub-regional collaboration

Maps of population structure and migration – would like to show data to find out which stocks are being used in illegal trade and target the areas of poaching.

6. Use of, and contributions to, various IOSEA Online Tools

It would be helpful to exchange genetic stocks — to better understand sea turtles stocks. Think they are impressive – but can be improved, e.g. tag database is not up to date.

7. Reporting on marine turtle conservation activities / developments of other relevant organisations

Member of SEAFDEC.

8. Details of planned meetings, workshops of possible relevance to other countries

Thailand would like to help neighbouring countries, conduct a regional course for training, a rescue course for marine endangered species including MT. Often includes Cambodia, Vietnam Malaysia.

United States

- Marine Turtle Conservation Act 2005 means dedicated funds, which had grown from \$100,000 to \$2M (2010), but is now shrinking again. Supports work in Cambodia, PNG, Indonesia, Vietnam.
- Hawksbills are being exploited.
 - o Indonesia: 2 major nesting sites for western Pacific leatherback. University of Papua.
 - o PNG: working with Nick Pilcher
 - o Vietnam: IUCN Vietnam, Environment Nature Vietnam, outreach education on nesting turtles left.
- Illegal take: Investigations revealed that while only a few fishermen are involved, they are very well protected and difficult to prosecute.
- In Cambodia, a rapid assessment was funded for hawksbill turtle nesting beaches, but only a few small sites were found.
- Bycatch issues:
 - o (2014) National Marine Service – bycatch report covers c. 500 fish stocks. American Samoa has to shut down when there are interactions (longline). Shrimp trawl fisheries use otter trawls, most recent figures date back to 2010, 6200 mortalities recorded. As a result looking at additional TED regulations.
 - o Cambodia: very important to work closely with the rural people, is it possible for us (as a group) to provide more support, workshops etc. Information is gathered from people and education.

Vietnam

16 marine reserves protected.
Small inland local people.

WEDNESDAY, 10 SEPTEMBER

Australia asked if we could identify common issues for future workshops or training purposes.

Cambodia — asked about multi species work and the importance of habitats.

Philippines — recognize that tools are needed to help countries deal with these issues internally; need better coordination amongst groups, especially NGOs; funding institutions should better filter and make sure that there aren't duplication of efforts; China is important country; what do we do vis-a-vis China; need a participatory approach; internet wildlife trade; it's a critical issue; sending specimens to Hong Kong, Singapore and China; INTERPOL member is in Hong Kong, but Hong Kong government has secrecy of information, they won't share information.

Cambodia — work closely with CITES on wildlife trade, everything tied closely together.

Myanmar — fisheries — work fisheries co-management — village fisheries societies can manage the fisheries directly themselves, tends to result in being more cooperative; I don't know if that should apply for turtles? Can fishers group protect marine turtles and their livelihoods?

Actor(s)	Topic	Proposed Action	Timeframe
Secretariat SEA+ sub-region	IOSEA Membership	To request IOSEA Secretariat to engage the remaining SEA+ states (e.g, China, Korea, Timor Leste, and Japan) to sign the IOSEA MOU, and as appropriate, the Signatory States will engage them at relevant forums to encourage them to attend the IOSEA MOU meetings and related events.	Ongoing
AC Secretariat	Species Assessments	SEA+ recommends that the next species assessment is hawksbill.	2017
SEA + sub-region	Hawksbills	Australia/Indonesia/PNG/USA work together to develop proposal to address to the threats to hawksbills on key foraging grounds in range states.	October 2015
SEA+ sub-region	Genetics	Request each SEA+ country to identify the genetic gaps for, beginning with nesting beach related genetics. SEA+ countries will, where possible, make a priority to conduct genetic assessments on fisheries bycatch and illegal trade seizures. SEA+ countries will try to submit haplotype information to genetic banks; AC can facilitate making this information available. SEA+ countries will endeavor to share sequenced data, particularly for hawksbill genetics.	Ongoing
SEA+ sub-region Secretariat	Sub-regional coordination	Request the Secretariat to facilitate an intersessional discussion amongst the SEA+ to determine the scope of a regional workshop to synthesize existing information in the region and identify gaps.	Early 2015

Actor(s)	Topic	Proposed Action	Timeframe
SEA+ sub-region Secretariat	Sub-regional coordination	Based on the result of the outcome of the aforementioned discussion, SEA+ will request the Secretariat and the AC to assist SEA+ to synthesize the existing projects, relevant MEA annual reports (e.g. IOSEA, CMS, ASEAN/SEAFDEC, etc), donor projects, literature in SEA+ to facilitate a regional workshop.	2015
SEA+ region Secretariat	Sub-regional coordination	Organize a SEA+ regional meeting on sea turtles. SEA+ countries respectfully requests Thailand to host this meeting. Thailand will consider providing support for the ASEAN countries.	2016
Secretariat Advisory Committee	Sub-regional coordination	Requesting the Secretariat to support key AC members to participate in this subregional meeting.	2016

**ANNEX 5: REPORT OF THE SIXTH MEETING OF THE
WESTERN INDIAN OCEAN MARINE TURTLE TASK FORCE (WIO-MTTF)**
Hosted by IOSEA at the Seventh Meeting of the Signatory States, Bonn, Germany
7th September 2014

Participants***Attendees***

Comoros – Mr Anfani Msoili

Kenya – Mr Mohamed Omar

Madagascar – Ms Félicitée Rejo

Mauritius - Mr Devanand Norungee

Mozambique – Mr Anselmo Gaspar

Seychelles – Dr Jeanne Mortimer

South Africa – Dr Ronel Nel

Tanzania – Milali Machumu, Ms Lindsey West (WIOMTTF Vice Chair)

United Kingdom – Dr Peter Richardson (WIOMTTF Chair)

Apologies

France - Mr Stephane Ciccione

Agenda

1. Introductions, meeting aims & objectives and adoption of agenda
2. Country updates from members: including recent significant marine turtle-associated developments/new activities within member states.
3. MTTF WIO socio-economic/cultural research workshops strategic planning: where we are now and the way ahead; identification of project champions; geographic sites; workshop content; outcomes and evaluation measures; agree implementation plan, including timetable and priority tasks.
4. Fish Aggregation Devices (FADs) and their impacts on turtles – what do we know and what can we do? (Jeanne Mortimer)
5. Summary of actions
6. Close

1. Introduction

On behalf of the Western Indian Ocean Marine Turtle Task Force, the Chair and Vice Chair would like to convey their sincerest thanks to Douglas Hykle of the CMS IOSEA Secretariat for his generous efforts in accommodating this meeting within the IOSEA Signatory States meeting.

2. Country updates of key marine turtle associated events

Comoros

- The monitoring of green turtle nesting in Moheli Marine Park continues in partnership with ADSEI NGO.
- There is collaboration with Kelonia on research and capacity-building with respect to green turtle genetics and satellite tracking.
- The problem with respect to poaching by fishers from other islands (Anjouan) was acknowledged.
- Comoros submitted a site proposal to the IOSEA Network of Sites of Importance for Marine Turtles for Moheli Marine Park.

Kenya

- Kenya Wildlife Service (KWS) is collaborating with US researchers on effects of climate change on marine turtle reproduction. Temperature loggers have been deployed at nesting sites to provide insight into the impacts of climate change on nest temperatures.
- The national seagrass and coral reef strategy will be launched in October 2014. This is a collaboration between KWS, Kenya Fisheries Department, Kenya Marine Fisheries Research Institute (KMFRI), Ministry of Environment, Cordio EA, Wildlife Conservation Society, WWF, East Africa Wildlife Society (EAWS). The work is linked to a regional coral reef task force via UNEP and the Western Indian Ocean Marine Science Association (WIOMSA). There will be an awareness campaign leading up to launch, including an essay competition in local schools.
- A bi-lateral meeting with Tanzania will be held in October to discuss a proposed coastal trans-boundary conservation area between Kenya and Tanzania with support from UNEP Nairobi Convention, which will address issues such as illegal fishing at the border including dynamite fishing.
- The Cabinet have approved a national Integrated Coastal Zone Management policy which incorporates issues related to marine turtles.
- There are ongoing habitat and nesting site monitoring programmes in collaboration with NGOs and local communities
- A biodiversity assessment has been completed in Kisite Mpunguti Marine National Park and Reserve.
- There are plans to secure turtle nesting sites with fencing in Malindi, Watamu, Mombasa and Lamu (Kiunga) to restrict access. Funding from Kenya Coastal Development Project (World Bank-funded project).
- KWS will be implementing the MASMA-funded Dugong programme that includes habitats assessments, Socio-economic assessments (by-catch assessment) and aerial census.

Madagascar

- New national strategy for marine turtle conservation (2012-2022) was published this year.
- Ministries and Focal Persons are working together to update sea turtle conservation measures and identify priority areas, with work on the ground targeting national marine parks and with assistance of international NGOs.
- Two sea turtle stakeholder workshops are planned for September (in south of Madagascar) and October (in north) 2014 focusing on biology, ecology and social aspects of turtle conservation.
- The Government is considering to use Vevo communities' approach to sea turtle conservation as a model for replication elsewhere in Madagascar.

Mauritius

- A national committee for conservation of sea turtles has been established to prepare a national action plan. This will be chaired by the Ministry of Fisheries and will involve collaboration between Government, NGOs and private sector.
- National sea turtle work will be funded by the Government and private sector. New work includes surveys to assess sea turtle nesting activity in Mauritius mainland, Agalega and St Brandon.
- Awareness and sensitisation campaigns using TV and radio, targeting public, school pupils and developers are being developed and implemented.
- A programme of beach patrols at potential nesting sites will be implemented through development of Ranger Programme. Private guards will be recruited to assist fishery officers in beach patrols and to collect nesting data.
- Surveys of nesting beaches are being organised for St Brandon through the national committee to collect data on sea turtles, mammals and birds. Survey Forms have been prepared for the collection of data.
- An observer programme on purse seiners is now in place to implement the IOTC Resolution 12/04 on the Conservation of Marine Turtles.

Mozambique

- Mozambique is celebrating 20 years of sea turtle monitoring at Ponto d'Ouro, which supports 80% of national leatherback nesting and 95% of national loggerhead nesting in Mozambique.
- The Ministry of Environment is leading on satellite tracking and genetics studies.
- Awareness programmes have been established with local communities at Bazaruto Archipelago in Inhambane Province.
- A large port development is underway in southern Mozambique close to Ponto d'Ouro.

Seychelles

- Seychelles has implemented long-term monitoring of nesting beaches with 20 programmes in operation in the country carried out by the Islands Conservation Society. The work is currently expanding into southern islands.
- A national marine spatial planning project (funded by The Nature Conservancy) has been established to identify new potential marine protected areas. Currently 50% of land area to be set aside for protection. New MPAs will include nesting beaches on outer islands, with up to 30% of national marine area under negotiation for inclusion in an expanded MPA network.
- Satellite tracking programmes including green and hawksbill post-nesting turtles are underway, and suggest further habitat mapping is needed to identify distribution of seagrass and coral reef habitat.
- A collaboration with IFREMER on green turtle genetics is underway, with a manuscript in preparation. Work with Karl Philips of University of East Anglia on hawksbill genetics was published as a PhD thesis in 2013 – see <https://ueaeprints.uea.ac.uk/48091/>
- The Seychelles' 2nd annual sea turtle festival was held in August 2014 – with extensive outreach activities. This event has now been approved as an annual event with support from the Ministry of Culture.
- Seychelles submitted a site proposal to the IOSEA Network of Sites of Importance for Marine Turtles for Aldabra.

South Africa

- South Africa has submitted a site proposal to the IOSEA Network of Sites of Importance for Marine Turtles for iSimangaliso Wetland Park.
- A spatial planning project is underway coordinated through the Nelson Mandela Metropolitan University developing an IOSEA site network analysis using MARXAN.
- Five more post-nesting leatherbacks have been satellite tagged in Natal, all migrated north into Mozambique Channel and remained in inshore, shallow waters (A leatherback has been tracked by India from the Nicobar islands to WIO region waters). In addition, a sub-adult

hawksbill was tracked from Natal to NE Madagascar demonstrating connectivity between sites that was previously unknown.

- Nesting beach monitoring programme is now approximately 50 years old. There are some uncertainties regarding status of the leatherback population. The SA Government will be providing funding to double the monitoring area.
- National management plan for turtles in progress, but not expected to be published within 2 years.
- The IOTC Observer programme in SA has not been functioning for the past two years.
- Ecological Risk Assessment regarding fisheries interactions in Indian Ocean was completed by Dr Nel for the IOTC.
- Tucek et al (2014) published the results of the loggerhead hatchling notching programme, which shows that age to maturity in South Africa's breeding loggerhead turtles is a mean of 36 years. See <http://max2.ese.u-psud.fr/epc/conservation/Publi/n023p167.pdf>

Tanzania

- Tanzania is celebrating its third successive season of saturation flipper tagging programme during peak nesting season (April & May) at two nesting sites.
- Four satellite tags have been deployed on post-nesting green turtles by Sea Sense. Three migrated: one to central Somalia, one remained in Tanzania and third migrated to Kenya but turned round and returned to Tanzania.
- A draft national sea turtle and dugong awareness strategy has been produced by the Tanzania Turtle and Dugong Conservation Committee (TTDCC), which is currently being circulated for comments.
- A series of marine legislation seminars were held in 2014 targeting law enforcement authorities, which were designed to sensitise officers on legislation protecting sea turtles.
- Tanzania has submitted a site proposal to the IOSEA Network of Sites of Importance for Marine Turtles for the Rufiji Delta – Mafia Island seascape.
- A bycatch survey is currently being conducted by Sea Sense in two districts involving at-sea observations during setting and hauling of gill nets and questionnaire interviews of fishers.
- The Marine Parks and Reserves Unit has conducted awareness campaigns in MPAs to address widespread consumption of turtle meat, which targeted local fisher communities.
- A flip-flop recycling project was launched in Mafia Island in 2013. The project is helping to clean nesting beaches in Mafia and generate income for local communities through the sale of recycled flip flop handicrafts.
- Sea Sense NGO has begun teaching modules in marine turtle biology and conservation at University of Dar es Salaam and the Fisheries Education and Training Agency (FETA).

United Kingdom

- An updated Conservation Management Framework for the Archipelago will be published later in 2014, and will include measures to further protect natural resources and strengthen enforcement.
- Turtle monitoring on Diego Garcia was revived in March 2011 and is implemented by personnel of the US Naval Support Facility (NSF) Environmental Office in collaboration with Jeanne Mortimer (Seychelles)
- Hays et al (2014) published the results of the first satellite tracking of post-nesting green turtles from the Chagos Archipelago (see <http://onlinelibrary.wiley.com/doi/10.1111/cobi.12325/abstract>). Seven out of 8 turtles tracked migrated away from the Archipelago, with two turtles migrating to Somalia, four turtles migrating to the Seychelles and one turtle migrating to the Maldives. Funding has been sought to expand this programme with more tags.
- Dr Graeme Hays will be returning to the Archipelago this year to continue his monitoring of nesting beach temperature through further data logger deployment at Diego Garcia.

3. MTTF WIO socio-economic/cultural research workshops strategic planning

Discussions were held regarding the pre-circulated concept note entitled '*Western Indian Ocean Marine Turtle Task Force Socio-Economic & Cultural Workshops*' (see Appendix 1). The MTTF members present accepted the concept note and proceeded with planning deliberations.

Geographical sites

Delegates identified and offered the following candidate workshop sites.

- Comoros: the ADSEI community-based project at Itsamia in the Moheli Marine Park (see http://www.ioseaturtles.org/pom_detail.php?id=59)
- Madagascar: Nosy Hara MPA in the north (MPA action plan currently being finalised), and Blue Ventures community-based fisheries and Locally Managed Marine Area (LMMA) sites in the west (e.g. Velondriake), or Vezo community areas in the south west (e.g. Andavadoaka).
- Tanzania: collaborative fisheries management areas (CFMAs) in the proposed Rufiji and Mafia Seascape 'IOSEA Site of Importance for Marine Turtles'.
- South Africa: Sekhulu community-managed mussel fishery project
- Kenya: some LMMA sites

Purpose, expected outcome and evaluation of workshops

Delegates identified the following turtle conservation threats/issues, an understanding of which could be facilitated through socio-economic and cultural research approaches potentially investigated through the workshops:

- Direct illegal take of turtles and turtle eggs;
- Bycatch and illegal use of accidentally caught turtles;
- Damage and disturbance to foraging grounds and nesting beaches caused by human activities;
- Local impacts of eco-tourism and other alternative livelihood schemes;
- Local impacts of education and outreach programmes.

Delegates identified the following benefits of participating in the workshops.

Purpose

- Share direct experiences of taking account of the 'human dimension' of turtle conservation between MTTF members;
- Showcase cooperation between government and local communities for conservation benefit (e.g. at Moheli Marine Park);
- Assist host nations with reviewing national action plans (e.g. Comoros with their review of the 1998 national turtle conservation action plan);
- Develop an understanding of processes and methods that can lead to strong community stewardship;
- Exposure to 'live experiences' and challenges;
- Gain technical knowledge of socio-economic research approaches and best practices;
- Improved understanding of the socio-economic implications of MPA designation (i.e. denial of access to resources);
- Observe direct experiences of successful MPA management.

Expected Outcomes

- Lessons learned and shared experiences;
- Direct observations and interactions with local communities involved in conservation initiatives;
- Opportunities to take host organisations' approaches home and adapt/replicate in other WIO countries;
- Leverage for additional funding due to increased scope of conservation approaches;
- Develop synergies with other species/ecosystem conservation initiatives and conservation tools;
- Optimisation of conservation effort and development of multi-disciplinary approaches.

Evaluation

- Measurable changes to approaches MTTF and associates are using to implement conservation interventions;
- Direct impact on turtle population indicators, e.g. hatching success, number of nesters;
- Increased funding opportunities, political support and private-sector engagement due to multi-disciplinary approach;
- Number of publications arising from work;
- Greater stakeholder engagement by projects (which may lead to greater compliance to regulations protecting sea turtles and their habitats).

Priority tasksProject champions and possible dates

MTTF members identified project champions from candidate locations and earliest proposed dates for hosting workshops.

Madagascar: Ms Félicité Rejo - end April to October 2015

Comoros: Mr Anfani Msoili - end May/early June 2015

Kenya: Mr Mohamed Omar – August 2015

South Africa: Dr Ronel Nel – July 2016

Tanzania: Milali Machumu - 2016

MTTF members also identified the following in-country tasks for project champions:

- Liaison with all relevant stakeholders/decision makers/Government;
- Identify venue(s), including site visits for agreed venue;
- Develop budget for costs of flights, accommodation, subsistence, insurance, ground transport etc.
- Develop list of invitees with MTTF Chair/Vice Chair, including local/regional socio-economists;
- Decide first language of workshop and recruit translators where necessary;
- Develop workshop format and programme;
- Source local/regional funding.

MTTF members identified regional coordination tasks for Chair and Vice Chair:

- Coordination between all participants, MTTF and IOSEA Secretariat;
- Coordination of international logistical planning;
- Securing and inviting regional/international socio-economic research experts;
- Sourcing international funding in collaboration with IOSEA Secretariat;
- Chair and/or Vice Chair attendance of workshops where appropriate;
- Coordinate regional and international publicity for initiative in collaboration with IOSEA Secretariat.

4. Fish Aggregation Devices (FADs) and their impacts on turtles – what do we know and what can we do? (presented by Dr Jeanne Mortimer)

Mauritius: 24 anchored FADs in Mauritian waters. No reported problems;

UK: Very limited data available on FADs;

Seychelles: A recommendation should be made to the Secretariat during the sub-regional consultations that FAD entanglement should be acknowledged and investigated through the Secretariat.

Dr Colin Limpus: Need data on numbers and distribution of FADs in the region in order for the issue to be recognised;

UK: Data should be captured in national reports, which are shared during SS7.

South Africa: Suggested adding FAD information to IOSEA website (including Dr Mortimer's presentation) and countries to add as data becomes available. This could create leverage to take issue to the Indian Ocean Tuna Commission and also educate stakeholders in the wider region about FAD design/use etc. so that they are more informed and more likely to report them when encountered.

ACTION: Chair to incorporate FAD discussion into meeting report, and make a recommendation through the sub-regional consultations during IOSEA SS7 meeting to all members to research FAD status in their country to share on IOSEA website (as agreed with Secretariat).

5. Summary of actions

- Chair and Vice Chair to develop proposal before the end of SS7 and circulate to MTTF for comments;
- MTTF comments to be sent to Chair before the end of September 2014;
- MTTF comments incorporated, and proposal finalised by end of October 2014;
- Location of first workshop agreed and costed by 15th October in preparation for first submissions to donor agencies/organisations.

6. Close

The meeting was closed after a summary of the actions was repeated by the Chair and confirmed with members.

Appendix 1**WESTERN INDIAN OCEAN MARINE TURTLE TASK FORCE
SOCIO-ECONOMIC & CULTURAL WORKSHOPS**

(Draft concept note as at 28 August 2014)

Socio-economic and cultural considerations are absolutely essential for understanding and resolving the many and varied complexities of environmental conservation and management. However, socio-economic and cultural considerations are routinely undervalued and ignored by conservation programmes, hence there is a pressing need to redress this situation.

Aim

Enhance marine turtle conservation, especially in the Western Indian Ocean (WIO), through broader acknowledgement and understanding of societal impacts of marine turtle conservation and human-turtle interactions.

Specific objectives

- Hold a series of sub-regional workshops to expose interested MTTF members and regional marine turtle conservationists and researchers to socio-economic research and best practice approaches;
- Enhance understanding amongst WIO MTTF members, collaborators and associates of socio-economic approaches to marine turtle conservation;
- Promote a multi-disciplinary approach to marine turtle conservation;
- Improve skills and efficiency of WIO MTTF members, collaborators and associates to design, implement and evaluate marine turtle conservation programmes that incorporate socio-economic and cultural considerations;
- Share experiences amongst WIO MTTF members, collaborators and associates and generate lessons learned to strengthen more effective and efficient marine turtle conservation activities throughout the wider IOSEA region;
- Subsequently, use the experiences and lessons learned to strengthen more effective and efficient marine conservation activities throughout the IOSEA region.
- Establish mechanism for capturing good practice and measuring impact of taking account of socio-economic and cultural considerations in the region.

Projected outcomes

- Enhanced capacity of MTTF members and other marine turtle conservationists working in the WIO to integrate socio-economic considerations into conservation programme design, implementation, and evaluation;
- Strengthened regional (WIO) cooperation and skills/knowledge transfer regarding socio-economic research and considerations in marine turtle conservation;
- Effective regional marine turtle conservation integrating and accounting for societal values/considerations of coastal communities and other key stake holders.

Measures of success

- Numbers of marine turtle conservation projects in the WIO region incorporating socio-economic research methodology and best practice into marine turtle conservation/marine resource use projects;
- Improved stakeholder engagement in regional marine turtle conservation programmes;

- Enhanced efficiency in the utilization of personnel, logistic and material support, and financial support in the design and implementation of marine turtle conservation activities and programmes in the WIO;
- More meaningful and lasting, alternative and novel conservation approaches and methods for WIO activities and programmes;
- Improved conservation outcomes;
- Growth and expansion in the use and adaptation of the WIO model(s) for strengthening integration and skills in socio-economic considerations throughout the IOSEA region.

Action: Develop a series of sub-regional workshops to expose interested MTTF members and regional marine turtle conservationists and researchers to socio-economic research and best practice approaches through participation in ongoing projects, and direct learning of basic socio-economic and cultural studies theory, research methodology and evaluation.

Provisional plan

- Develop by consensus a MTTF strategy for implementing this aspect of the MTTF workplan, before the end of the 7th Meeting of the IOSEA Signatory States;
- Primary steps:
 - o Draft and develop outline proposal with MTTF members before the 7th Meeting of the IOSEA Signatory States meeting;
 - o Identify project champions within the WIO, particularly MTTF representatives, with a commitment to implementing the proposal in a timely manner;
 - o Finalise, before the end of the 7th Meeting of the IOSEA Signatory States:
 - project principles, objectives, outcomes, and evaluation procedures of project;
 - outline of workshops and content;
 - identify geographic units within the WIO for conducting specific workshops (e.g. workshops conducted in English, French, Swahili, etc.);
 - finalise an implementation plan, time table, and priority tasks with project champions.
- Establish methods for measuring and reporting short, medium and longer term impact
- Before the end of 2014, develop advanced plans for the first pilot workshop in 2015 in a selected host nation for sub-regional MTTF participation (e.g. Comoros, Madagascar, Tanzania).
 - o With the active support of project champions, identify collaborators from projects and practitioners in socio-economic-cultural research and conservation, and identify host workshop location;
 - o Develop detailed workshop outline with project champions and project collaborators, host nation and regional experts;
 - o Together with key actors identify various types of support (e.g., specialised personnel, travel, lodging, equipment, materials, financial) necessary to carry out the workshop;
 - o Together with key actors develop proposals for support and funding, identify potential supporters and funders, and submit proposals for support;
 - o Finalise plans and implement workshop with key players;
 - o Together with key players write a full report on the results of first workshop, and distribute it to MTTF members, the IOSEA Secretariat, and other key players.
- Review experiences and lessons from first workshop, and develop plans and proposals for second and subsequent workshops in the WIO sub-region.

**ANNEX 6: IOSEA BUDGET FOR 2015-2017
AND INDICATIVE SCALE OF VOLUNTARY CONTRIBUTIONS**

IOSEA Marine Turtle Memorandum of Understanding Budget Estimates for 2015 - 2017 (in US Dollars)				
Budget line	2015	2016	2017	Total
10 Personnel				
1100 Professional Staff				
1101 Co-ordinator / CMS Senior Advisor ¹	*173,000	*189,000	*189,000	
Salary covered by IOSEA Trust Fund	146,000	162,000	162,000	470,000
1201 Project activities arising from Leatherback Assessment	10,000	5,000		15,000
1202 Project activities arising from Loggerhead Assessment	5,000	5,000	5,000	15,000
1203 Site Network Development activities	10,000	5,000	5,000	20,000
1220 Unspecified consultancies	5,000	5,000	5,000	15,000
1221 Specialised consultancies	32,000	0	0	32,000
1300 Administrative Support				
1321 Team Assistant – balance paid from IOSEA Trust Fund ²	8,000	21,500	23,000	52,500
1600 Travel on official business				
1601 Secretariat travel	17,500	17,500	22,500	57,500
1999 Personnel Subtotal	233,500	221,000	222,500	677,000
30 Meetings				
3301 Meeting of Signatory States + Advisory Committee ³	0	0	120,000	120,000
3999 Meetings Subtotal	0	0	120,000	120,000

¹ CMS will contribute € 20,376 (approx. USD 27,000) per annum towards salary cost in exchange for CMS advisory services, from 2015 through 2017. Figures for 2015 reflect temporary staffing arrangement.

² Bangkok-based Team Assistant (post currently vacant), to be funded from UNEP programme support costs, up to USD 24,500 p.a.; amounts reflect balance to be paid from IOSEA Trust Fund.

³ Total meeting cost may be reduced by earmarked contributions/grants.

40 Equipment and Premises				
4100 Expendable equipment				
4101 Miscellaneous supplies (if not from UNEP/ROAP)	250	275	300	825
4200 Non-expendable equipment				
4201 Office equipment (computers, peripherals)	0	2,000	0	2,000
4999 Equipment and Premises Subtotal	250	2,275	300	2,825
50 Miscellaneous Costs				
5100 Operation and Maintenance				
5101 Operation/maintenance computers (c/o UNEP/ROAP)	0	0	0	0
5102 Operation/maintenance of copier/fax (c/o UNEP/ROAP)	0	0	0	0
5103 Rent, maintenance costs (UNEP/ROAP)	2,778	11,065	11,065	24,908
5200 Reporting Costs				
5201 External production of info material	2,500	0	0	2,500
5300 Sundry				
5301 Routine Telephone, Fax, Postage (c/o UNEP/ROAP)	1,000	1,000	1,250	3,250
5303 Contingency	1,800	2,000	2,000	5,800
5999 Miscellaneous Costs Subtotal	8,078	14,065	14,315	36,458
SUBTOTAL	241,828	237,340	357,115	836,283
6000 UNEP programme support costs (13%)	31,438	30,854	46,425	108,717
GRAND TOTAL	273,266	268,194	403,540	945,000

Indicative scale of voluntary contributions, based USD 315,000 average annual budget					
Based on standard UN scale modified to approximate historical contributions of past donors, plus minimum contribution of USD 750, and enhanced contributions from "Group of Ten" ⁴					
No.	Signatory State	Current UN scale %	Scale adjusted to 100 %	Amended scale adjusted to 100 %	Indicative Voluntary Contribution
1	Australia	2.074	5.28260	12.69841	40,000
2	Bahrain	0.039	0.09934	0.23810	750
3	Bangladesh	0.010	0.02547	0.23810	750
4	Cambodia	0.004	0.01019	0.23810	750
5	Comoros	0.001	0.00255	0.23810	750
6	Egypt	0.134	0.34131	0.63092	1,987
7	Eritrea	0.001	0.00255	0.23810	750
8	France	5.593	14.24569	15.87302	50,000
9	India	0.666	1.69634	4.76190	15,000
10	Indonesia	0.346	0.88128	1.62908	5,132
11	Iran (Islamic Republic of)	0.356	0.90675	1.67617	5,280
12	Jordan	0.022	0.05604	0.23810	750
13	Kenya	0.013	0.03311	0.23810	750
14	Madagascar	0.003	0.00764	0.23810	750
15	Maldives	0.001	0.00255	0.23810	750
16	Malaysia	0.281	0.71572	1.32304	4,168
17	Mauritius	0.013	0.03311	0.23810	750
18	Mozambique	0.003	0.00764	0.23810	750
19	Myanmar	0.010	0.02547	0.23810	750
20	Oman	0.102	0.25980	1.58730	5,000
21	Pakistan	0.085	0.21650	0.40021	1,261
22	Papua New Guinea	0.004	0.01019	0.23810	750
23	Philippines	0.154	0.39225	0.72508	2,284
24	Saudi Arabia	0.864	2.20066	4.06800	12,814
25	Seychelles	0.001	0.00255	0.23810	750
26	South Africa	0.372	0.94751	7.93651	25,000
27	Sri Lanka	0.025	0.06368	0.23810	750
28	Sudan	0.010	0.02547	0.23810	750
29	Thailand	0.239	0.60875	1.26984	4,000
30	United Arab Emirates	0.595	1.51550	2.80146	8,825
31	United Kingdom	5.179	13.19121	12.69841	40,000
32	United Republic of Tanzania	0.009	0.02292	0.23810	750
33	United States of America ⁵	22.000	56.03525	25.39683	80,000
34	Viet Nam	0.042	0.10698	0.23810	750
35	Yemen	0.010	0.02547	0.23810	750
	Total	39.261	100.00000	100.00000	315,000

⁴ Historical donors > USD 500 shown in green; historical donors ≤ USD 500 shown in yellow; minimum contribution of USD 750 applied to developing/least developed countries; all other countries shown in gray.

⁵ United States: reflects only indicative contribution from State Dept; excludes potential contributions from NOAA and USFWS (Marine Turtle Conservation Act).

ANNEX 7: REPORT OF THE SEVENTH MEETING OF THE ADVISORY COMMITTEE, 5-7 SEPTEMBER 2014

Agenda item 1: Welcoming Remarks

1. The Chair of the Advisory Committee (AC), Dr. Jack Frazier, thanked all participants for having made a tremendous effort to travel all the way to Germany. He encouraged everyone to express their sincere opinions during the meeting. IOSEA Coordinator, Douglas Hykle, welcomed participants to Bonn and introduced his assistant, Ms. Pishum Migraine, who was tasked with recording the minutes of the meeting. Upon request, he explained the absence of the two Advisory Committee members, Dr. Shanker and Mr. Chokesanguan, who were unable to attend because of other work commitments.

Agenda item 2: Admission of observers and adoption of the agenda

2. After the admission of two observers, the meeting participants (Appendix I) briefly introduced themselves. Following discussion, the provisional agenda (Appendix II) was adopted after a number of organisational amendments were introduced by the Chair, who emphasised the need for the Committee to prioritise areas in need of recommendations for consideration by the Signatory States. It was agreed that the following agenda points would receive particular attention: Site Network (item 6.6), Summary of by-catch issues (item 6.7), and Technical Support/Capacity-building (item 6.8). Other important issues such as illegal take and trade, social issues/human dimensions of conservation (item 6.9), and standardisation/harmonisation (item 6.10) could be covered only briefly. The Secretariat drew attention to four agenda items it had proposed for inclusion, since they would be considered at the Meeting of Signatory States and would benefit from the Committee's advice: Overview of IOSEA implementation (item 6.1); Marine turtle genetic stocks (item 6.2); Summary of illegal take/trade issues in the IOSEA region (item 6.3); and Recommendations arising from species assessments (item 6.4).

Agenda item 3: Overview of arrangements for the Seventh Meeting of the Signatory States (SS7)

3. The Coordinator provided a brief overview of the arrangements for the subsequent 4-day Meeting of the Signatory States. He anticipated the participation of about 50 delegates from 25 countries, noting that several important Signatory States would likely not be represented. A small number of nongovernmental and private sector organisations were expected to attend. It had been hoped that the CITES Secretariat would send a representative to participate in the discussions on illegal trade, but this was not possible because of other commitments. While participants from a number of countries had experienced difficulties securing visas enabling them to travel to Germany, mainly due to the lateness of their applications, the Secretariat had received good cooperation from the German authorities to try to expedite the visa process.

Agenda item 4: Summary of objectives of the present meeting of the Advisory Committee

4. The schedule provided for a two-day meeting to complete most of the agenda items, including the formulation of recommendations for the Signatory States which are captured in this meeting report. The third day was reserved principally for discussion of the nominations to the IOSEA Marine Turtle Site Network – the results of which are appended to the report. Dr. Frazier welcomed arrangements made for the Western Indian Ocean – Marine Turtle Task Force to hold discussions, among other things, on the socio-economic and cultural aspects of marine turtle conservation, during a separate meeting to be held simultaneously on Day 3 at the same venue.

Agenda item 5: Review of past work of the Advisory Committee and its members since the 6th Meeting of the IOSEA Signatory States

5. The Chair drew attention to the Objective of the IOSEA Memorandum of Understanding (MT-IOSEA/SS.7/Inf. 02) and also the mandate of the Advisory Committee as described in its Terms of Reference (MT-IOSEA/SS.7/Doc.13) to remind the members of their broad responsibilities. He emphasised the need for the Committee to concentrate its efforts on issues expressly stated in these core texts. He opined that these fundamental activities should be better addressed by determining priorities as well as diversifying the membership of the Committee. He provided a compilation summarised activities of AC members since the last meeting of the Signatory States (Appendix III).

Agenda item 6: Summary of the objectives of the 7th Meeting of the IOSEA Signatory States**(a) Overview of IOSEA MoU Implementation and Site-based Information**

6. The Coordinator introduced the “Overview of IOSEA MoU Implementation” (document MT-IOSEA/SS.7/Doc. 6), which provided an exhaustive analysis of the national reports submitted by Signatory States. It was complemented by a second document containing “Site-Based Information on Species, Habitats, Threats and Mitigation Measures” (document MT-IOSEA/SS.7/Doc.6.1). The SS7 meeting would be asked to focus mainly on the executive summary and Document 6, Part I, which summarised the main findings. Among the many observations, suggestions and recommendations put forward by the Secretariat, he highlighted a number of issues for which Advisory Committee/SS7 feedback was sought, corresponding to the points in the table of Part I¹. At the suggestion of Dr. Tiwari, it was agreed that the points should be taken up in the course of the discussion of the corresponding agenda items, with a review done at the end of the meeting to see whether anything was missed. In relation to national reporting, the observer from South Africa recommended that the report template include a temporal dimension, so as to clarify when turtle conservation activities are current as opposed to past; and Dr. Miller suggested that the questions in the national report template pertaining to illegal trade and take be revised and strengthened. Later, the Secretariat suggested that those who complete the reports could be requested to include annotations to indicate the year in which the information was entered; and that the instructions in the sections on illegal take/trade could be elaborated further to indicate more precisely what a comprehensive response should include.

(b) Marine Turtle Genetic Stocks

7. Dr. Limpus presented the main conclusions of a paper he co-authored with Dr. FitzSimmons, concerning marine turtle genetic stocks of the Indo-Pacific (document MT-IOSEA/SS.7/Doc. 10.2), to be considered by the Meeting of the Signatory States. He noted that while the Site Network nomination process had concentrated on nesting beaches, other areas associated with all marine turtle life stages, such as foraging areas and migratory corridors, are also important for the purpose of assessing and ensuring the viability of turtle stocks. While the maps presented in the paper clearly illustrate areas in need of more genetic sampling and research, the Committee agreed that these findings on genetic stocks needed to be translated into concrete recommendations for follow-up activities by Signatory States, particularly in relation to collaborative research and management. For instance, it was suggested that data collection should be intensified through regional collaboration, and technical support offered to less developed countries, as well as through partnerships with five recognised genetics laboratories. Also, the genetics work could be linked more closely with the Species Assessments and the Site Network process, which could help to identify index beaches and priority foraging areas. The meeting agreed to form a working group to develop succinct recommendations, as follows.

¹ 1. Descriptions of exemplary approaches; 3. Adverse incentives; 14. Critical review of management programmes; 20. Analysis of international flipper tag data; 24. Species assessment (for green turtles); 26. Standardisation/harmonisation of methods; 27. Review of education/awareness initiatives; 28. Alternative livelihood opportunities; 36. Training effectiveness and synergy. (Numbers refer to the corresponding paragraphs in the table in Part I of document MT-IOSEA/SS.7/Doc.6, which the Secretariat introduced in the meeting.)

8. In order to understand the distribution of turtles away from the nesting beach using genetic analysis, it is essential to identify genetic characteristics of the nesting populations.

- Signatory States should prioritize which genetic stocks need identification at nesting and foraging areas and, where possible, on the high seas;
- The species assessments & site network process should inform the prioritization of genetic analysis of populations;
- The Secretariat will assist countries with contact addresses for applying for CITES permits;
- The Advisory Committee will assist with contacts for laboratories specializing in sea turtle genetics.

(c) Summary of illegal take/trade issues in the IOSEA region

9. After discussing briefly the comprehensive review of illegal take and trade prepared by the Secretariat (document MT-IOSEA/SS.7/Doc. 10.1), the Committee recommended that the Secretariat try to raise the profile of marine turtle trade issues among intergovernmental organisations / networks that focus on other aspects of wildlife crime and to collaborate more closely with CITES, ASEAN-WEN and TRAFFIC. The Secretariat could also give more visibility to marine turtle trade issues on the IOSEA website, for example by posting announcements on meetings organised by CITES and TRAFFIC, and featuring exemplary legislative and enforcement actions carried out by Signatory States. It was proposed that the existing paper, which could serve as an entry point to the topic, should be updated and submitted to CITES COP17, to be held in South Africa in 2016. The observer from the United States noted that the Secretariat of the Inter-American Sea Turtle Convention was already collaborating closely with CITES and that a joint approach could be productive. The Committee agreed that more consideration should be given to the issue of marine turtle poaching and trade in the Site Network proposal evaluation process. It was suggested that one way to achieve this would be to request more explicit mention of turtle exploitation and poaching in the section pertaining to threats affecting marine turtles in the vicinity of the site, and to revise the evaluation criteria accordingly.

(d) Recommendations arising from species assessments

10. Introducing document MT-IOSEA/SS.7/Doc. 9, the Coordinator recalled the preliminary follow-up actions that had been drawn up, based on the species assessments that had been developed under the aegis of the Advisory Committee in recent years, namely for the leatherback (document MT-IOSEA/SS.7/Inf.10) and the loggerhead (document MT-IOSEA/SS.7/Inf.11). The meeting formed two working groups of four members each to evaluate priorities for work arising from the information and management gaps identified in the respective species assessments, to prepare more concrete proposals for consideration by the Signatory States during the sub-regional consultations at SS7. With regard to the leatherback turtle (for which 4 brief priority project concepts were developed), the Committee proposed four actionable project concepts to be undertaken: in Sri Lanka, where monitoring and sampling is needed; in places where there is egg relocation and hatcheries (particularly in Malaysia and Thailand); in places where coastal management practices (e.g., dune stabilization) are of concern; and in Indonesia, where there is poorly documented widespread, low density nesting (Appendix IV). The working group dealing on the loggerhead assessment presented three project concepts to: elucidate hatchling production rates and post-hatchling dispersal in the Indian Ocean; elucidate nesting activity on Socotra Island (Yemen), mainland Oman, and Sri Lanka; and elucidate vulnerability of nesting beaches in the IOSEA region (Appendix V). All project proposals were endorsed by the Committee, before submitting them for consideration by the Signatory States. It was suggested that in subsequent stages of the process, the Secretariat should seek funding from other partner organisations such as NGOs.

11. With reference to the priority species/management units in need of conservation action listed by Signatory States in their national reports and presented in the Secretariat's Overview of IOSEA Implementation, the Committee noted the value of developing comparable assessments for other species. After discussing the merits of developing assessments for either green or hawksbill turtles, recognising the significant effort that had gone into the preparation of the most recent loggerhead assessment, and taking into account recent/ongoing assessment work of other bodies, it was agreed that the next IOSEA assessment should focus on hawksbill turtles. Drs. Limpus, Hamann and Miller volunteered to form a committee to take the work forward intersessionally.

(e) Thematic Workshop I: Potential solutions to light pollution: technology, management and regulation

12. The Coordinator announced that the workshop planned for the second day of the SS7 meeting might have to be cancelled, as the main organiser had just notified him of his inability to participate. After further consultation, it was agreed that an abbreviated 45-minute workshop would go ahead with contributions from Drs. Limpus and Hamann supporting the main collaborator in the original workshop plan, Dr. Kellie Pendoley. A second workshop on stakeholder engagement, being organised by Dr. Peter Richardson, was unaffected by the change in plans. Dr. Limpus sought an assurance that for future workshops associated with Meetings of the Signatory States, the Advisory Committee would be consulted earlier in the planning process and given an opportunity to suggest topics for workshops and contribute expertise. The issues of predation/egg loss and use of hatcheries were among the topics raised.

Review of pending commitments of the Advisory Committee

(f) Site Network

13. The Advisory Committee acknowledged the important efforts invested by some of its members, as well as by the Secretariat, towards the development of the IOSEA Site Network over the past decade. It was regretted that many late submissions from Signatory States, some of which were received only a few days before the Meeting, had prevented the evaluation process from being as equitable and effective as it could have been otherwise, and had failed to appreciate and honour the large amount of time and resources dedicated by the Advisory Committee to this voluntarily exercise. On the other hand, the Chair commended the United Republic of Tanzania for having submitted the first candidate site within the timeframe defined at the Sixth Meeting of the Signatory States. The Committee welcomed the Secretariat's suggestion to invite a constructive discussion at the SS7 Meeting of the challenges faced by Focal Points in meeting their collective commitments.

14. The meeting developed a working document summarising the evaluation status of the ten Site Network proposals submitted by Signatory States. (An eleventh, incomplete proposal submitted informally by Thailand had not been transmitted to the Committee, as the proponent indicated that they would not be in a position to finalise the submission on time.) Clarification was needed about the formal endorsement of two of the proposals, submitted by Comoros and the Philippines, respectively. With regard to the latter, it was decided that the deadline for confirmation of the nomination status could not be extended beyond 6 September. With regard to the proposal by Comoros, it was later confirmed that indeed the document had the full endorsement of the government.

15. The Committee agreed to designate a 'mentor' from among the members present for each Site Network proposed, to provide feedback to proponents to help them strengthen their proposal during and/or after IOSEA SS7. With a view to improving the quality of nomination proposals submitted to future Meetings, and simplifying the process, it was also agreed that advisory assistance should be offered to proponents during the completion phase of the Site Information Sheets, but that such "pre-submission" mentors should serve only as resource persons and not be involved in the writing of the proposal.

16. Considering the Site Network proposals that had already been reviewed, the Committee observed a lack of understanding among certain proponents of some of the required elements, and suggested that the Site Information Sheet template be revised to clarify some sections. The Chair emphasised that approved Site Network proposals would be fundamental for not only developing the network, but also for raising support and recognition of the process; hence approved proposals must serve as exemplary “show pieces” for the following stages of its development. The Secretariat reiterated its commitment to undertake editorial revisions of the submitted proposals to correct linguistic or organisational deficiencies, without affecting their substance, prior to their publication on the IOSEA website. Similarly, related Site Network information materials such as the template, evaluation criteria and website page might benefit from repackaging as to make them more attractive to potential donors.

Procedure for review and evaluation of proposals

17. With reference to document MT-IOSEA/SS.7/Doc. 7, and considering the exceptional situation generated by numerous late submissions, the Secretariat proposed a decision-making framework to assist the Advisory Committee to reach conclusions about the evaluations of the proposals under consideration, with a view of making clear recommendations to the Meeting of Signatory States. After lengthy discussion, the methodology was amended to include an additional category, and to include deadlines for re-submission of proposals depending on their status category. The Committee rejected as impractical the possibility of inter-sessional evaluation and endorsement of Site Network proposals submitted by Signatory States. It was agreed that the suggested evaluation framework (Appendix VI) should be submitted to the Meeting of Signatory States for review and final endorsement, with the understanding that the guidelines constituted a unique, one-time arrangement for the present meeting, in order to deal with the problem of proposals that had been submitted late. It was further agreed that, once the Advisory Committee had reached consensus on a final recommendation with respect to each of the nomination proposals, the designated mentors should contact the proponents to encourage any necessary revision of their proposal, during or after the Signatory State meeting. This initial interaction might be scheduled after SS7 agenda item 8a (Network of Sites of Importance for Marine Turtles) had been introduced.

Procedure for follow-up review and evaluation of approved sites

18. The Chair alerted the meeting that in the future there was likely to be a need for re-evaluation of sites within the Network and raised the question of when and how this process might be dealt with, and against which criteria – an issue that had also been mentioned by audience members in a number of briefing sessions in which the Secretariat had participated over the last year. However, the question had not yet been formally raised or discussed among the Signatory States. The Committee recognised the value of periodically re-evaluating sites once the implementation process had been initiated, but considered it premature at this stage of the Site Network’s development to enter into detailed discussion of the matter. An appropriate time frame would need to be agreed for assessing trends in abundance of nesting/foraging turtles, as well as changes in management practices and/or human pressures at particular sites. It was proposed that this discussion, including consideration of a reporting template for network sites, be taken up at the next Meeting of Signatory States (SS8).

Evaluation and follow-up

19. The Committee discussed the modalities for evaluating the nominated site network proposals, making use of a modified version (Appendix VII) of the draft Evaluator Rating Sheet annexed to the IOSEA Site Network Evaluation Criteria (MT-IOSEA/SS.7/Doc. 7, Annex 1). The final review was to be considered by the Committee before mid-day, 7 September, with two independent reviewers from the Advisory Committee assigned to each proposal. The rating sheets would be annotated with commentary explaining the rationale for each score. It was further agreed that reviewers would note any particular difficulties encountered with the Evaluation Criteria or Site Information Sheet template, with a view to documenting and discussing them collectively at the end of the review process. In this

regard, Dr. Limpus noted that marine turtle abundance is not in all cases a suitable criterion for assessing the importance of a site, such as in the case of smaller management units. The Committee suggested that, in the future, Signatories proposing sites with small but significant nesting populations (in terms of management units) invest efforts in developing complementary arguments to justify the inclusion of such sites in the IOSEA Site Network.

20. The conclusions of the Advisory Committee's deliberations are summarised in Appendix VIII. The Committee acknowledged that irrespective of the recommendations offered by the Advisory Committee to the Meeting of Signatory States for consideration and endorsement, the final decision about which sites should be included in the IOSEA Site Network ultimately rests with the Signatory States.

Financial and logistical support

21. The Chair reminded the meeting that at SS6 there had been an agreement to begin the process of seeking financial support for Site Network development and implementation. The Coordinator further explained that the Site Network Resolution of SS6 called for the establishment of "a steering committee to seek financial support for the implementation of the Site Network and to consider other operational issues that may arise intersessionally", the Coordinator mentioned his attempts, in consultation with the United States Focal Point, to lay the groundwork for such a steering committee. Preliminary contacts had been made with foundations that might have an interest in the Site Network, with nongovernmental organisations with expertise in fund-raising and, most recently, with corporate interests that might eventually see the Site Network as a worthy investment for funds that are part of mandatory conservation offset schemes. The Committee emphasised the urgent need for all of these avenues to be pursued more actively in the months following the meeting, with the active participation of the Signatory States.

(g) Summary of by-catch issues in the IOSEA region

22. With reference to document MT-IOSEA/SS.7/Doc. 10.4, the Coordinator drew attention to the analysis the Secretariat had prepared of national reports submitted by member States of the Indian Ocean Tuna Commission (IOTC). The review demonstrated and underlined the importance for IOSEA to further develop partnerships with IOTC, which had shown interest in marine turtle by-catch issues in the Indian Ocean in the recent past, as evidenced by a dedicated resolution on the subject (12/04). The IOTC Scientific Committee had recommended collaboration with IOSEA to improve data collection and to offer specialised training to increase post-release survival rates of marine turtles. The Coordinator urged the Committee to take advantage of these opportunities to enhance IOSEA's involvement in by-catch mitigation efforts, for instance by contributing papers to the IOTC's Working Party on Ecosystems and Bycatch (WPEB). The observer from the United States offered to investigate, within her own organisation (NOAA), the possibility of collaborating with IOTC/IOSEA in delivery of technical support, such as marine turtle-related observer training. For its part, the Advisory Committee expressed its willingness to consider favourably IOTC requests for technical advice, subject to financial support and availability.

23. The Advisory Committee noted that by-catch issues were problematic to deal with due to a paucity of data and lack of standardisation of certain parameters, as well as their complex nature, stemming from different marine turtle species, fishing gear and levels of fishing effort (industrial/artisanal, domestic/international) involved. Hence, the organisation of a single technical workshop may not be effective to adequately address by-catch issues. Instead, the Committee encouraged Signatories to develop partnerships with a variety of NGOs to involve them further in by-catch data collection and in the implementation of mitigation measures at the ground level in artisanal fisheries. This complementary approach could be pursued without additional financial commitment from the Signatories. The meeting also suggested that Signatory States begin addressing by-catch issues in the countries and locations that are identified as priority areas in the species assessments. It

was noted that one of the candidates nominated to serve on the Advisory Committee has a fisheries background, which would enhance the Committee's overall ability to interact with these bodies.

24. The Committee recommended that the Secretariat improve the visibility of by-catch issues by making use of opportunities offered by the IOSEA website. This could be achieved by adding a section on by-catch on the home page (including an updated version of Doc. 10.4.) and linking to relevant videos and other information material produced by other organisations (for example in Australia and the United States). The meeting also briefly reviewed a PhD proposal focused on the impacts of fisheries activities on marine turtles in the Indian Ocean. Such initiatives, coming from academia, provide additional, robust information, and the Chair strongly encouraged other similar proposals that should produce much-needed information, from Committee members or other researchers.

(h) Technical support / Capacity-building

25. Dr. Miller gave an in-depth presentation of the history, methods and challenges faced in the development of the IOSEA Technical Support / Capacity-building Programme. The goal of the programme, as defined in draft document MT-IOSEA/SS.7/Doc. 8, was to strengthen the technical and institutional capacity of the Signatory States in order to better implement the IOSEA Conservation Management Plan (CMP). The Secretariat noted that although the programme had yet to meet its objectives, a number of training workshops had been successfully completed, several further expressions of interest were under consideration, and modest financial support from the United States Marine Turtle Conservation Fund was available for the implementation of small projects. The Committee provided constructive feedback to Dr. Miller with regard to his planned presentation to the Signatory States, which demonstrated the value of the IOSEA Online Reporting System as a means of capturing detailed and useful information from Signatory States.

26. Dr. Tiwari observed that the Technical Support / Capacity-building Programme programme and the Site Network process had the potential to strengthen each other. The former served as an incentive for Signatories in need of capacity building to explain this clearly in their respective Site Network proposals, given that the Site Network process recognised technical support/capacity-building needs, as documented in the Site Information Sheets. The Site Network, in turn, could help to identify which technical support/capacity-building programmes should be implemented as a priority. In that regard, the Committee encouraged Site Network mentors to help proponents identify where the IOSEA Technical Support / Capacity-building Programme could address training needs at their site, as well as help articulate more precisely their actual resource requirements.

27. The Chair opined that the Committee should recognise and give credit to the training programmes already existing throughout the IOSEA region and to support these, through promotion of greater collaboration throughout the region. This would make the implementation of the relatively new IOSEA Technical Support / Capacity-building programme more effective by optimising resources, and strengthening regional cooperation. Other members of the Committee noted that it was the duty of the Advisory Committee to propose options to Signatories where they were needed and requested. The Coordinator suggested that the sub-regional consultations of the Meeting of Signatory States would be an appropriate forum for identifying technical support / capacity-building needs in IOSEA Signatory States. Accordingly, Committee members were assigned responsibility for participating in the different sub-regional groups and clarifying the intentions of the Advisory Committee in developing a Technical Support / Capacity-building Programme, with an ultimate goal of promoting self-sufficiency.

Review of critical yet unaddressed issues

(i) Social issues/human dimensions fundamental to the objectives of the IOSEA

28. The Coordinator briefly introduced MT-IOSEA/SS.7/Doc. 10.3 and Addendum, which had been prepared in response to a need identified by the Sixth Meeting of the Signatory States. The Committee noted the importance of taking account of social issues/human dimensions in marine turtle conservation, but acknowledged the limited capacity within and beyond the Advisory Committee to adequately deal with them. Efforts had been made in the past to recruit members with socio-economic background into the Advisory Committee, with mixed results. The Committee learned that efforts were underway in the Western Indian Ocean – Marine Turtle Task Force (WIO-MTTF) to try to organise a series of workshops on social issues/human dimensions which, if realised, might serve as a way forward for other sub-regions to emulate; this important initiative was applauded by the meeting and further discussion of the topic was expected during the Sub-regional consultations in the coming days. Combined with the inputs prepared for the present Meeting of Signatory States – notably, the comprehensive paper prepared by the Secretariat and a thematic workshop on stakeholder engagement that was planned for 10 September – these efforts constituted positive developments in a challenging area of investigation and management.

(j) Standardisation / harmonisation of technical terms, protocols, methods, reporting, etc.

29. The Chair noted that – bearing in mind core IOSEA documents, such as the Conservation and Management Plan – it is a duty of the Committee to promote regional standardisation of technical terms, protocols, methods and reporting, with a view to enhancing regional cooperation, which is at core of IOSEA's mandate. After lengthy discussion, the Committee recommended that any data collection project conducted in the region should report rigorously on the methodology followed, whatever the method chosen among the many options available. The Coordinator encouraged members to take note of discrepancies or inconsistencies observed in the descriptions provided in Site Network proposals being reviewed. As a first step, the Committee suggested that a glossary of standardised terms might be prepared for inclusion in the IOSEA website. It encouraged the Secretariat to supplement the existing links to various conservation/management manuals already contained in the Electronic Library of the IOSEA website. The Committee agreed that the issue of standardisation/harmonisation should be kept under review.

Agenda item 7: Review and evaluation of the Advisory Committee

30. The Chair introduced a questionnaire, which had been discussed earlier in other fora, and had been circulated to members of the Committee before the meeting; to maintain anonymity, the responses to the questionnaire were compiled by a third party. The exercise was intended to collect frank views on how to make the Committee more effective and efficient. Members were invited to review the comments which had been compiled and circulated in a single document. The importance of periodically conducting critical self-evaluations was stressed.

Agenda item 8: Recommendations of the Advisory Committee (Appendix IX)

31. During the course of the meeting there were repeated comments relevant to numerous overarching issues. In particular these included the need to: provide the Signatory States with clear recommendations; set clear priorities; design proposals that are “actionable”; establish and comply with timelines; make use of and inter-link IOSEA initiatives, such as site-based information, species assessments, and site network proposals; recognise the common lack of basic information and ensure the availability of up-to-date, credible information; ensure that spatial, temporal, and organisational/institutional scales are clear; strive for quality control; promote and optimise cooperation at various levels (local, national, bi-national, sub-regional, regional, and beyond) – for example, with the Indian Ocean Tuna Commission; follow-up on and evaluate various initiatives;

show-case the relevance of IOSEA initiatives to those of other programmes; and involve a responsive Advisory Committee in advising at various levels of IOSEA initiatives.

Agenda item 9: Other business

32. The Chair indicated that he had been invited to report orally to the Meeting of the Signatory States on 8 September on the main issues considered during the Advisory Committee meeting and on its proposed recommendations. He invited all members of the Committee to provide written inputs to the present report, to be validated by the Committee.

33. The Committee drew attention again to two issues captured elsewhere in this meeting report, relating to a potential, future workshop on predation issues, and a need to review the IOSEA national report template, in particular in relation to temporal information and illegal trade issues.

Agenda item 10: Closure of the meeting

34. Several members of the Committee expressed their gratitude to the Chair for his investment of time and effort in attempting to ensure efficient communication within the Committee. The Chair congratulated all members of the Committee for their dedication and adjourned the meeting.

LIST OF APPENDICES

Appendix I – List of participants to the Seventh Meeting of the IOSEA Advisory Committee

Appendix II – Agenda of the Seventh meeting of the IOSEA Advisory Committee

Appendix III – Recent activities (from SS6 to SS7) of Members of the IOSEA Advisory Committee

Appendix IV – Provisional list of project concepts resulting from the updated (2012) Leatherback Assessment

Appendix V – Provisional list of project concepts resulting from the updated (2013) Loggerhead Assessment

Appendix VI – Suggested evaluation framework for Site Network proposals

Appendix VII – IOSEA Site Network Evaluation Sheet

Appendix VIII – Advisory Committee recommendations regarding Site Network proposals (as at 7 September 2014)

Appendix IX – Recommendations/suggested actions extracted from the draft Final Report of the Advisory Committee (as at 10/9/2014)

Appendix I**LIST OF PARTICIPANTS TO THE SEVENTH MEETING OF
THE IOSEA ADVISORY COMMITTEE**

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Appendix II**AGENDA OF THE SEVENTH MEETING OF THE IOSEA
ADVISORY COMMITTEE**

1. Welcoming remarks
2. Admission of observers and adoption of Agenda
3. Overview of arrangements for the Seventh Meeting of Signatory States (SS7) (*Secretariat*)
4. Summary of objectives of the present meeting of the Advisory Committee
5. Review of the work of the Advisory Committee and its members since the 6th Meeting of the IOSEA Signatory States
6. Summary of the objectives of the Seventh Meeting of the IOSEA Signatory States (*Items of particular relevance to the Advisory Committee*)
 - (a) Overview of IOSEA MoU Implementation/Site-based Information [**Doc. 6, Doc. 6.1**]
 - (b) Marine Turtle Genetic Stocks [**Doc. 10.2**]
 - (c) Summary of illegal take/trade issues in the IOSEA region [**Doc. 10.1**]
 - (d) Recommendations arising from species assessments [**Doc. 9**]
 - (e) Thematic Workshop I: Potential solutions to light pollution: technology, management and regulation

Review of pending commitments of the Advisory Committee

 - (f) Site Network [**Doc. 7**]
 - Procedure for review and evaluation of proposals*
 - Procedure for follow-up, review and evaluation of approved sites*
 - Evaluation and follow-up modifications*
 - Financial and logistical support*
 - (g) Summary of bycatch issues in the IOSEA region [**Doc. 10.4**]
 - (h) Technical support / Capacity- building [**Doc. 8**]

Review of critical yet unaddressed issues

 - (i) Social issues/human dimensions fundamental to the objectives of the IOSEA MoU [**Doc. 10.3**]
 - (j) Standardisation/harmonisation of technical terms, protocols, methods, reporting, etc.
7. Review and evaluation of the Advisory Committee
8. Recommendations of the Advisory Committee
9. Other business
10. Closure of the meeting

Appendix III**RECENT ACTIVITIES (FROM SS6 TO SS7) OF
MEMBERS OF THE IOSEA ADVISORY COMMITTEE
(as at September 5)****Ali Al Kiyumi**Administration and management of programmes relevant to marine turtles/protected areas/etc.

Legislations, laws and monitoring:

- Royal Decree (114/2001) and Royal Decree (6/2003) that protect wild species of sea turtles (locally)
- Ranger employed by Ministry of Environment and Climate Affairs (MECA) to patrol in protected areas (locally)
- Regional protection of sea turtles which are known to migrate to other countries beaches or coast
- Regional cooperation in research for sea turtles, especially genetic studies
- The Environment Society of Oman (ESO) has been managing a Marine Turtle Conservation Programme since 2008 that focuses on Loggerhead Turtles on Masirah Island. Additional regional work has been done on Hawksbill Turtles at the Damaniyat Islands in collaboration with the Ministry of Environment and Climate Affairs (MECA) and EWS-WWF.

Education and training relevant to marine turtle research and conservation

With regards to awareness and education the following has been done by MECA and the other important partners:

- Awareness campaigns in local schools and women societies.
- Visitors center was constructed in Masirah Islands and Ras al Hadd Natural Reserve
- Community Outreach projects done by the ESO on Masirah Island such as:
 - o The Annual Masirah Festival which takes place at the beginning of the loggerhead nesting season;
 - o The deployment of signage and public information posters on Masirah island promoting turtle conservation.
 - o ESO hired three local field assistants on Masirah Island since 2009 (initially hired as part-time but now part of the full time staff of the organization). The Fields Assistants have been receiving continuous training and capacity building on monitoring, field surveying, satellite tagging, data collection and management. They are involved in other conservation projects targeting the Egyptian Vulture and the Arabian Humpback Whale species, which enhances their field skills.
- Outreach activities have been initiated on Masirah Island, notably:
 - o Masirah Annual Turtle Festivals in 2010, 2011, 2012 and 2013
 - o Signage deployment including turtle conservation messages on the Damaniyat Islands in 2012 and on Masirah Island in 2014

Fund-raising relevant to marine turtle programmes and other activities

Oman does not hold fundraising campaigns specific to marine turtle programmes.

Policy development relevant to marine turtle research, conservation, education, and training

Locally:

- Formation of a national committee of sea turtle conservation projects in the Sultanate of Oman by ministerial decision (85/2013), which aims through its specification to enhance sea turtle conservation in the Sultanate of Oman.
- Declaration of Natural Reserves: Ras Al Hadd Sea Turtle Natural Reserve was proclaimed by Royal Decree No.25/96. It aims to protect marine turtles, their nesting sites and eco-tourism
- Establishment of a visitor center at Ras Al Jinz in 2008

Internationally:

- The Sultanate ratified on 16 March 2004 the Memorandum of Understanding for the protection and management of marine turtles and their habitats in the Indian Ocean and South East Asia (IOSEA), which became effective for Oman on 1 June 2004

Research activities relevant to marine turtles

The following papers have been published on sea turtle studies since 2011:

- Al-Bahry, S. N., Mahmoud, I.Y., Melghit, K., Al-Amri, I. (2011). Analysis of Elemental Composition of the eggshell before and after Incubation in the Loggerhead Turtle *Caretta caretta* in Oman. *Microscopy and Microanalysis*, 17, 1-9.
- Mahmoud, I. Y., Al-Kindi, A. Y., Khan, T., Al-Bahry, S. N. (2011). Detection of Low Plasma Estradiol Concentration in Nesting Green Turtles (*Chelonia mydas*) by HPLCM-MS. *Journal of Experimental Zoology Part A: Ecological Genetic and Physiology*, 315, 170-174.
- Ba-Omar, T., Mahmoud, I., Al-Hiani, T., Al-Bahry, S.N. (2011). Microscopic Study of the development of the optic Cup of the green turtle, *Chelonia mydas* in Oman. *Microscopy and Microanalysis* 17 (S2), 210-211.
- Al-Bahry, S. N., Al-Zadjali, M.A., Mahmoud, I.Y., Elshafie, A.E. (2012). Biomonitoring marine habitat in reference to antibiotic resistant bacteria and ampicillin resistance determinant from oviductal fluid of the nesting green sea turtle, *Chelonia mydas*. *Chemosphere*. 87, 1308-1315.
- Al-Bahry, S. N., Mahmoud, I., Al-Rwahi, S., Paulson, J. 2011. Egg contamination as an indicator of environmental health. In: *Impact of Egg Contamination on Environmental Health*. Nova Science Publisher, Inc. New York, USA p.p. 1-24.
- Mahmoud, I. Y., Al-Musharafi, S. K., Al-Bahry, S. N., Al-Amri, I. S. (2014). Environmental changes and their effects on the fate of the sea turtle reproductive potential and conservation. In: Farooq, S. A., Abed R., Senan, B. *Biotechnology and Conservation of Species from Arid Regions*. pp. 125-136. Nova Science Publisher, Inc. New York.
- Mahmoud, I. Y., Al-Musharafi, S. K., Al-Bahry, S. N., Al-Amri, I. S. (2014). Environmental changes and their effects on the fate of sea turtle reproductive potential and conservation. Chapter 12. In: Farooq, S. A., Abed R., Senan, B. *Biotechnology and Conservation of Species from Arid Regions*. pp. 125-136. Nova Science Publisher, Inc. New York.
- Al-Musharafi, S. K. (2014). Analysis of heavy metal in eggshells of green turtles, *Chelonia mydas*, by scanning electron microscopy and x-ray microanalysis Chapter 13. In: Farooq, S.A., Abed, R., Senan, B., *Biotechnology and Conservation of Species from Arid Regions*. Pp.137-144. Nova Science Publisher, Inc. New York.

Moreover, in 2012 ESO conducted some research activities listed below:

- Hawksbill Satellite Tracking, Flipper Tagging and DNA Sampling;
- Masirah Olive Ridley and Hawksbill Nesting Beach Survey;
- Masirah Loggerhead Nesting Beach Survey;
- Beach Use and Beach Stranding Surveys.

Bundit Chokesanguan

Recent activities of SEAFDEC/TD related to the conservation of sea turtles

1. Promotion on the use of C-hook

Referring to scientific findings of SEAFDEC on the use of C-hooks that result in a hooking rate of sea turtles, which is lower than when using conventional j-hooks. SEAFDEC has promoted the use of C-hooks in its member countries since 2011. SEAFDEC organized a series of national training programmes to promote the use of C-hooks for reducing sea turtle mortality, conducted in: Malaysia (Kuantan, Malacca, Kuching, Perak, and Samporna), Myanmar (Yangon). This aimed to raise awareness of fishers, and to enhance knowledge of fisheries officials on the reduction of sea turtle incidental catch for hook-and-line fisheries. Training materials that SEAFDEC introduced and delivered during the training course include: how to handle an accidental sea turtle catch, the use of d-hooker (tool for removing hook from sea turtle) and its guidelines, c-hook samples given to fishers for their own trial later, sea trial with participants, knowledge on interaction between sea turtles and fishing based on SEAFDEC's study, etc.

2. Onboard observation on the sea turtle interaction with FADs

SEAFDEC has collected information on the possibility of entangling sea turtles from FADs used for tuna fishing. Major findings of this collection have been disseminated together with key recommendations to reduce the entangling of sea turtles in FADs.

3. Study on the response of sea turtles to sound stimuli

SEAFDEC has conducted an experiment aiming to know the response of sea turtles to various frequencies of sound. The experiment was conducted in collaboration with the Department of Marine and Coastal Resources of Thailand at Sea Turtle Conservation Center, Rayong Province. It could be concluded that they will respond to frequencies below 350 Hz.

Jack Frazier

Administration and management of programmes relevant to marine turtles, protected areas, etc.

- Review and revision of diverse IOSEA documents:
 - o Extensive revisions on form and documentation, including coordinating detailed revisions of >3 specialists from Site Networks for birds;
 - o Detailed revisions of diverse IOSEA Site Network proposals;
 - o Detailed revisions of other IOSEA proposals and activities;
- Board of Directors of International Sea Turtle Society (ISTS) (until May 2014)
 - o Lead the revision of Constitution and Bylaws of the ISTS;
 - o Promoted greater clarity of procedural issues of ISTS;
 - o Promoted auto-evaluation & greater clarity in management

Education and training relevant to marine turtle research and conservation

- Local workshop in eastern extreme of Pacific Ocean (range of some western Pacific turtle stocks)

- Promoted greater appreciation for “human dimensions”/social issues
 - o Collaboration with WIO MTTTF workshop planning;
 - o Public talks to ISTS about the importance of socio-economic and also cultural considerations

Fund-raising relevant to marine turtle programmes and other activities

- Promoted & supported fund raising for young and junior marine turtle specialists;
- Contracted two translators/style editors for “Marine Turtles as Flagships”

Policy development relevant to marine turtle research, conservation, education, and training

- Detailed review of national reports from Lima Convention (Chile, Peru, Ecuador, Colombia, Panama) with recommendations for eastern extreme of Pacific Ocean (range of some western Pacific turtle stocks)
 - o Recommendations for research and management priorities;
 - o Recommendations for enhanced collaboration, regionally and across ocean basin;
 - o Recommendations for completion of standardization and harmonization process

Research activities relevant to marine turtles

- Collaborating with various authors on papers on:
 - o Archaeological & ancient cultural aspects of marine turtles at ~5000 BP site in Oman;
 - o Evaluation of major nesting beach for *Chelonia mydas* in WIO = Itsamia, Comores;
 - o Paleohistory of the Indian Ocean, and implications on zoogeography
- Publications:
 - o 2012. Successful success stories, Conservation & Society 2012
 - o 2012. Nest and Track Surveys. Pp. 260-264. In: R. W. Mc Diarmid, M. S. Foster, C. Guyer, J.W. Gibbons, and N. Chernoff (eds.) *Reptile Biodiversity: Standard Methods for Inventory and Monitoring*. University of California Press, Berkeley CA.
 - o 2012. Eckert, K.L., B.P. Wallace, J.G. Frazier, S.A. Eckert, and P.C.H. Pritchard. 2012. Synopsis of the biological data on the leatherback sea turtle (*Dermochelys coriacea*). U.S. Department of Interior, Fish and Wildlife Service, Biological Technical Publication BTP-R4015-2012, Washington, D.C.
 - o International Instruments: Critical Tools of Conserving Marine turtles of the Eastern Pacific Ocean, In: *Sea Turtles of the Eastern Pacific Ocean: Advances in Research and Conservation* (J.A. Seminoff and B. P. Wallace Eds.) University of Arizona Press. 154–192.
 - o The Occurrence of Tortoiseshell on a Pre-hispanic Maya Mosaic Mask, *Antiquity* 86(333): 825–837 (+ 2 appendices).

Mark Hamann

- Served on Board for International Sea Turtle Society 2009 to 2013
- Member of the expert panel for Chevron’s Barrow Island turtle project (Australian East Coast).
- Member of the expert panel for the Australian Government’s revision process for the marine turtle recovery plan.
- Co-author of the draft Referral Guidelines for marine turtles, dolphins and dugong (documents prepared for the Australian Government to guide assessments of applications for coastal development).

- Project co-leader on Australian Government funded research projects (*National Environmental Research Program*, NERP) to improve knowledge about marine turtles, dugong and marine wildlife in northern Australia.
- Project co-leader on research several projects aimed at improving knowledge of turtle behavior around ports and shipping.
- Advisor of 2 PhDs relevant to IOSEA
 - o Ruth Kamrowski (completed in 2014) – light pollution and marine turtles
 - o Coralie D’Lima (will submit in 2014) – inshore dolphin and fisheries interactions in east India (has implications for managing marine turtle bycatch and wildlife tourism)
 - o Kimberly Riskas (enrolled 2014) – bycatch of marine turtles in the Indian Ocean
 - o Paul Whittock and Takahiro Shimada (will submit 2015) home range and behavior of turtles in and around ports and industry.
- Author/co-author of 16 peer reviewed publications since 2012.
 - o 3 on ecological aspects of light pollution
 - o 2 on social (human behavioural aspects of light pollution)
 - o 4 on turtle behavior and satellite tracking
 - o 1 on marine turtles and climate change
 - o 2 on Governance of marine turtles
 - o 1 on Management of ports and shipping development
 - o 3 on plastic pollution impacts

Colin Limpus

Administration and management of programmes relevant to marine turtles, protected areas, etc.:

- Leadership of the Qld Government Turtle Conservation Project coordinating annual monitoring of loggerhead, green, flatback, olive ridley turtles at index nesting beaches in Queensland to assess population trends (National).
- Organising committee for 1st and 2nd Australian Marine Turtle Symposia in 2012 and 2014 (National).

Education and training relevant to marine turtle research and conservation (e.g., fisheries bycatch):

- IOSEA Myanmar Marine Turtle Training and Capacity Building Workshop (Sub-regional);
- Training of indigenous Land and Sea Rangers in monitoring of marine turtle nesting populations; predator control management on nesting beaches and sustainable use of marine turtles in north Queensland based out of Mapoon Turtle Camp and Mon Repos Training Camp (National);
- Supervision and collaboration with post-graduate students in marine turtle studies (sub-regional): turtle health and disease in response to extreme weather events; metal bio-accumulation and toxicology for green turtles; green and loggerhead turtle foraging habitat use in response to extreme weather using satellite telemetry; satellite telemetry study of post-nesting migration of olive ridley turtles; stable isotope studies with foraging green turtles and nesting loggerhead turtles; anthropogenic light horizons on Australian turtle rookeries and

impact on flatback hatchling ocean finding; statistical comparisons of nesting census methodologies; population genetics of olive ridley, loggerhead, green and flatback turtles.

Fund-raising relevant to marine turtle programmes and other activities:

- Funding of satellite telemetry studies to investigate green turtle foraging habitat use in response to extreme weather impacts and port development (National);
- Funding of indigenous ranger training (National).

Policy development relevant to marine turtle research, conservation, education, and training:

- In collaboration with Australian Government, facilitated technical meeting to draft a Single Species Action Plan for loggerhead turtles in the South Pacific Ocean for adoption at CMS COP11 (addresses nesting and foraging in eastern Australia) (Regional)

Research activities relevant to marine turtles:

- Global GIS mapping of temporal and spatial distribution of marine turtle nesting and migration (Regional)
- Researching ocean-finding behaviour of marine turtles, including disruption of ocean finding behaviour of loggerhead, green and flatback turtles to changed light horizons from street lights, including amber LED lights (National).
- Satellite telemetry studies of foraging green turtles, investigating their behaviour associated with port dredging activities and their response to underwater military explosions (National).
- Mark recapture analysis of long term tagging data from 5 index beaches from 2 stocks of flatback turtles, quantifying population size and survivorship trends (National).

Jeff Miller

- Attended the 2012 meeting in Bangkok in January. Presented to the Advisory Committee on the BoBLME project and to the Signatory Countries on reproductive ecology and development of marine turtles (in coordination with Dr. C. J Limpus).
- Attended the IOSEA Regional meeting during the 33rd Annual Symposium on Sea Turtle Biology and Conservation, February 2-8, 2013 in Baltimore, and presented a brief review of activities and services available to countries through IOSEA. Had numerous informal discussions with attendees from the IOSEA countries.
- Attended the IOSEA regional meeting during the 34th Annual Symposium on Sea Turtle Biology and Conservation in New Orleans in 2014 and presented a brief review of activities and services available to countries through IOSEA. Had numerous informal discussions with attendees from the IOSEA countries.
- Presented a 3 day training workshop entitled “National Training Workshop for Conservation of Sea Turtles” for the Environment Friends Society in Bahrain in May 2014. Material included biological characteristics, stranding activities, husbandry, and how to develop a national stranding program; generated a list of potential projects for the Audience included Government officials, fishermen, veterinarians, and conservation group members.

- Completed review of Technical Support and Capacity Building Program. Prepared a synoptic report on the review for presentation at the IOSEA meeting in Bonn.
- Have reviewed a few Site proposals.
- Have been working with King Fahd University of Petroleum and Minerals (KFUPM) and Aramco in Saudi Arabia to begin satellite tracking of nesting turtles from Karan & Jana Islands and to eradicate mice from the islands. Funding has been granted for tracking project. (Not really a part of IOSEA but important players in the region)

Kartik Shanker

Activities related to marine turtles 2011 – 2014

1. Networks for conservation

- In 2009, I established the Turtle Action Group, a national network of non-governmental organisations and individuals to collaborate on and coordinate efforts on the conservation of marine turtles and their habitats. We helped convene the 4th and 5th annual meetings of Turtle Action Group (TAG) in Chennai (November 2011) and Jamnagar, Gujarat (January 2013). Through a grant from the USFWS, we provide small grants to a few organizations in the network, and training and capacity building through the workshops.
- As part of our capacity building efforts, we have conducted training programmes for the Forest Department in Kerala, Karnataka, Orissa and Andaman and Nicobar Islands, and plan to conduct a programme in Gujarat shortly.
- I help oversee the activities of the Orissa Marine Resources Conservation Consortium, a platform to bring together local communities and conservationists in Orissa. I have been involved in establishing a collaborative platform for conservation in the Andaman and Nicobar Islands called the Island Resource Network, which includes NGOs, government agencies (including Forest Department, Navy and Coast Guard) and private resorts and tour operators.
- In September 2014, we will conduct a regional meeting for researchers including participants from India, Sri Lanka and Bangladesh.

2. Outreach

- My team has developed a comprehensive manual on sea turtle conservation and management and distributed it to government and non-government organisations throughout the country. The manual has been translated into *Gujarati* and is being translated into *Tamil*. We have also developed a set of 15 posters that have been distributed widely. Most recently, we have developed a poster on ‘Best Practices for Sea Turtle Hatcheries’ which will be translated and distributed. My team provides back-end support for the production and distribution of the *Indian Ocean Turtle Newsletter*.
- We have developed a website, Sea Turtles of India (www.seaturtlesofindia.org) with comprehensive information about sea turtle distributions in India, research, as well as exhaustive bibliographies and resources. We are building an online data portal that organisations around the country can use to enter, visualize and share data.

3. Research

- I have been conducting long term research on olive ridley turtles at Rushikulya, Orissa since 2007. Here, we monitor offshore populations, solitary nesting, mass nesting, nest predation, hatching success, beach temperatures and sex ratios, and beach profiles.
- I have also maintained a long term monitoring programme for leatherback turtles in Little Andaman Island. Here, we monitor nesting, predation, hatching success, beach temperatures, and beach profiles. We have a tagging programme and have also tracked 10 turtles using satellite transmitters.
- We are also initiating a monitoring programme at the newly discovered mass nesting beach for olive ridley turtles at Cuthbert Bay in middle Andaman Island.
- In addition, I have continued my research on the genetics of sea turtle populations on the coast of India.

4. Policy

I have been involved in discussions with the Ministry of Environment and Forests, both with issues relating to IOSEA, and other issues. Most recently, I have been part of a group of individuals and non-governmental organisations that are exploring the legality and potential impacts of rehabilitation housing and aquaculture farms at the Rushikulya mass nesting rookery in Orissa.

5. Fundraising

I have raised funds from the USFWS Marine Turtle Conservation Act Fund for monitoring and conservation of sea turtles in India. In addition, we have raised funds from the International Seafood Sustainability Foundation for the conservation of leatherback turtles in the Andaman and Nicobar Islands. Funds from the Ministry of Environment and Forests to the Centre for Ecological Sciences, Indian Institute of Science, Bangalore also support the monitoring programmes in Orissa and the Andaman Islands. Satellite telemetry of leatherback turtles was supported by the Indian Space Research Organisation – Space Technology Cell at Indian Institute of Science, Bangalore.

Manjula Tiwari

- I was invited to be on the IOSEA Advisory Committee on Feb 5, 2012
- In Papua, Indonesia, I am the scientific and technical advisor to the leatherback project managed by the State University of Papua, and I have been involved in:
 - o research to quantify factors impacting hatchling production
 - o the development and implementation of a science-based management and conservation program for leatherbacks
 - o training/capacity building of project personnel
 - o liaising with the government
 - o education, outreach, and community-based conservation
- I have been on the PhD Committee of 1 Indonesian student, and am co-authoring several peer reviewed publications coming out of this dissertation.
- In Oman, I have been involved in:
 - o fisheries bycatch around Masirah Island

- satellite telemetry of loggerheads nesting on Masirah Island
- I am part of the Pacific Leatherback Working Group and the Bellagio Working Group, which address issues in some of the IOSEA region countries – Indonesia, Papua New Guinea, Vietnam.
- I am the Editor-in-Chief of the African Sea Turtle Newsletter, which also highlights and distributes research and conservation contributions from the Western Indian Ocean.

Appendix IV**PROVISIONAL LIST OF PROJECT CONCEPTS RESULTING FROM THE
UPDATED (2012) LEATHERBACK ASSESSMENT****Priority areas**

Western Indian Ocean: Provide partial support or help to leverage funding for a post-graduate study to investigate the hatching success and incubation temperature of leatherback and loggerhead rookeries in Mozambique. This research should be done in conjunction with sub-regional experts (e.g. Dr Ronel Nel/South Africa).

Note: Due to related studies from South Africa indicating that hatching success and incubation temperatures are favourable it is a suspected low priority. However, as the SWIO leatherback population is rated as critically endangered it needs to be assessed in the future.

Northern Indian Ocean: Devise a low-cost monitoring protocol, identify and monitor index sites consistently for a period of 3-5 years in Sri Lankan leatherback rookeries, and collect genetic samples as a contribution to a region-wide assessment. Possible collaborators: local conservation bodies (e.g. Turtle Conservation Project (TCP) – Sri Lanka) and interested experts (e.g. MCS/Dr Peter Richardson).

Note: Considered a priority and so developed into Project 1.

Thailand & Malaysia (+ other programmes): Review egg relocation and hatchery practices and, where appropriate, suggest and implement management interventions to enhance hatching success and produce balanced sex ratios. Short-term expert consultancy.

Note: Considered a priority and so developed into Project 2.

Habitat Rehabilitation: Assess the extent of use of exotic vegetation to stabilize beach/dune systems and the impacts thereof through a questionnaire survey throughout the IOSEA region. If appropriate (based on the survey results), develop a short paper that outlines the problems associated with using for example Casuarina trees in beach/dune stabilization and provide recommendations and guidelines as to the sensible removal of these trees from beach dune/ecosystems. Commission an expert desktop study to conduct the survey and develop the paper.

Note: Considered important and so developed in to Project 3.

Indonesia (Java/Sumatra): Engage with local environmental agencies and NGOs (e.g. through a workshop) to document the extent of leatherback nesting, particularly in Java/Sumatra and disseminate education and awareness materials, to stimulate future data collection and the establishment of turtle monitoring programmes, where relevant.

Note: Considered important and so developed in to Project 4.

Papua New Guinea: Aerial surveys have identified Buang-Buasi and Kamiali as important nesting sites. It has been suggested to establish long-term monitoring to determine nesting abundance trends in PNG (Dutton et al 2007). IOSEA to engage with experts working in the region to identify opportunities for support (e.g. technical training, data management systems, education and awareness) to enable local communities to establish inexpensive monitoring programmes.

Note: Existing efforts in the region already underway so no need for additional action.

Additional Suggestions

(a) The Steering Committee (Bellagio Sea Turtle Conservation Initiative, 2008) highlighted beach erosion as a growing issue, along with predation at some to key island rookeries. Targeted support for technical training for egg relocation of “eggs/nests at risk” may assist in enhancing hatching success.

Note: Considered important and so developed in to Project 2 & 3.

(b) An Action Plan has apparently been developed through a Memorandum of Understanding (MoU) among Indonesia, Solomon Islands, and Papua New Guinea to support field conservation efforts and establish effective institutional and funding mechanisms to implement management activities in a sustainable manner. Implementation of this plan should be a priority.

Note: Leave to other frameworks e.g. Bellagio

Priority projects

Project 1: There are few continuous long-term data but the available data indicate that there is variable but significant nesting in Sri Lanka. Through an expert-directed workshop including local experts and conservation bodies:

- Devise a low-cost monitoring protocol,
- Identify and monitor index sites consistently for a period of 3-5 years in Sri Lankan leatherback rookeries,
- Train individuals in the procedures to collect (and store) tissue samples that can be contributed to a region-wide genetic assessment.

Suggested Collaborators: local conservation bodies (e.g. Turtle Conservation Project (TCP) – Sri Lanka) and interested experts (e.g. MCS/Dr Peter Richardson).

Project 2: Given the potential impact of egg relocation and hatchery practices on critically low populations in the IOSEA regions undertake an expert consultancy to:

- Review the extent of egg relocation and hatchery practices in the region (particularly Thailand).
- The impact of egg relocation and hatchery practices
- Identify examples of best practice for egg relocation and hatchery
- Host a technical training workshop for individuals/organizations that are currently undertaking (or considering) egg relocation practices.
- Draft a brochure and training material to highlight best practice principles in egg relocation and hatchery practices.

Project 3: Coastal management practices e.g. dune stabilization through the use of Casuarina trees, potentially have a significant impact on turtle nesting habitat in the IOSEA region and so affect nesting and hatching production. Through a post graduate research project with expert advice/support

- 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.
- Use data from the IOSEA website, google earth and other spatial tools to map and quantify the extent of the impacts.
- Overlay these impacts with known nesting habitats
- Identify priority areas for rehabilitation or other forms of mitigation.

Project 4: Recognising that there is widespread, low-density nesting along the Indian Ocean margin of southern Indonesia (in particular Java and Sumatra) engage with local environmental agencies and NGOs through an expert-directed workshop to:

- Document the extent and quantification of leatherback nesting, and
- Identify threats hampering successful hatchling production
- Consider alternative livelihood practices that could facilitate the long-term sustainability of data collection.
- Develop and disseminate education and awareness raising materials to stimulate future data collection and the establishment of turtle monitoring programmes, where relevant.

Note to all projects: Collect tissue samples for genetic analysis and stable isotopes wherever possible.

Appendix V**PROVISIONAL LIST OF PROJECT CONCEPTS RESULTING FROM THE
LOGGERHEAD ASSESSMENT (2013)**

Project 1: There is a lack of knowledge of hatchling production rates and hatchling and post-hatchling dispersal of loggerhead turtles from rookeries in the Indian Ocean.

This should be done for each of the management units, noting that the baseline data available differs across the management units.

Determine (step 1) temporal and spatial patterns of clutch distribution (step 2) survivorship of eggs and hatchlings (step 3) socioeconomic opportunities/barriers to manage egg loss and if possible (step 4) use ocean modelling coupled with genetics to understand oceanic dispersal.

Project 2: Available data indicate that there is variable but significant nesting by loggerhead turtles on Socotra, Mainland Oman and occasional nesting in Sri Lanka

Through an expert-directed workshop including local experts and conservation bodies:

- Devise a low-cost monitoring protocol,
- Identify and monitor index sites consistently for a period of 3-5 years in Socotra, Mainland Oman and Sri Lankan rookeries,
- Train individuals in the procedures to collect (and store) tissue samples that can be contributed to a region-wide genetic assessment.

Project 3: There is a lack of knowledge on the vulnerability of loggerhead turtle nesting beaches in the IOSEA region to climate change

This should be done for each of the management units, noting that the baseline data available differs across the management units.

- Quantify sand temperature profiles from index beaches to better understand the variability of temperatures that eggs are exposed to.
- Use beach height data, distribution maps and other spatial datasets to understand vulnerability of IOSEA stocks

Appendix VI**SUGGESTED EVALUATION FRAMEWORK
FOR SITE NETWORK PROPOSALS**

1. Acceptance of the proposal, without need for further revision (apart from Secretariat editorial corrections).
2. Acceptance of the proposal, subject to clarification/minor revision to be completed by the proponent before the conclusion of SS7.
3. Conditional acceptance of the proposal, subject to the provision of additional information by the proponent within [six] months of the conclusion of the SS7 meeting; followed by Advisory Committee review and positive recommendation.
4. Recognition that the proposal has merit but requires substantive revision prior to resubmission for reconsideration at the next Meeting of Signatory States.
5. Rejection of the proposal, on the grounds that it is unlikely to meet the criteria for inclusion, even if substantive revision were undertaken.

Appendix VII

IOSEA SITE NETWORK EVALUATION SHEET

CRITERIA	SCORE RANGE	Actual Score	Potential score	Comments / rationale for score
I. Ecological and Biological Criteria				
EB1a. Turtle abundance (at nesting sites)*	3 6 9 12 15			
EB1b. Turtle abundance (foraging sites)*	0 5 10 15			
EB2. Species and/or management unit richness	6 9 12 15			
EB3. Presence of rare marine turtle species	6 9 12			
EB4. Resistance and resilience	1 to 8			
<i>Sub-Total [cf. Expected minimum category value = 18]</i>				
II. Governance Criteria				
G1. Legal framework	1 to 8			
G2. Conservation actions	1 to 10			
G3. Collaborative management, surveillance and enforcement	1 to 8			
G4. Research and monitoring	4 6 8			
G5. Sustainable human and financial resources	1 to 8			
<i>Sub-Total [cf. Expected minimum category value = 20]</i>				
III. Socio-economic and Political Criteria				
S1. Cultural importance	1 to 6			
S2. Compatible activities	1 to 6			
S3. Educational value	1 to 6			

S4. Existing recognition	0 2 4 6			
S5. National significance	1 to 6			
S6. Perceived ancillary benefits as a consequence of the site's inclusion in the network	1 to 6			
<i>Sub-Total [cf. Expected minimum category value = 15]</i>				
IV. Network-wide Ecological Criteria				
N1. Representativeness and replication	1 to 4			
N2. Ecological connectivity	1 to 8			
N3. Area	1 3 6 9 12			
<i>Sub-Total [cf. Expected minimum category value = 10]</i>				
GRAND TOTAL [cf. Expected minimum total score = 75]				

Instructions to Evaluators:

As seen throughout this document, the evaluation scales have values ranging from 0 to 15, together with descriptive text (particularly for the top and bottom end of the scale, and one to three values in between) to help guide evaluators. **In general, values can be assigned along the full continuum, and need not be restricted to the indicative values / descriptions shown in each scale.** Also, in exceptional cases, a zero value may be assigned when a particular criterion is not met at all.

However, the "Fixed Scales" associated with criteria EB1, EB2, EB3, G4, S4, and N3 are the exceptions to this general rule, as they do not accommodate intermediate or zero values.

* Note in relation to Criterion EB1 (a/b): Where several species nest or forage at a single site, the score for the most abundant species is to be used, not the sum of scores for all of the species present. This is because species/management unit richness is evaluated under Criterion EB2.

Appendix VIII**ADVISORY COMMITTEE RECOMMENDATIONS REGARDING SITE NETWORK PROPOSALS (as at 8 September 2014)**

	Proposal	Date submitted	Evaluators	Mentors	Final ranking
1	United Republic of Tanzania: Rufiji Delta – Mafia Channel Complex	31 October 2013	Jack Frazier & Mark Hamann	Jack Frazier	Acceptance of the proposal, without need for further revision (apart from Secretariat editorial corrections).
2	South Africa: iSimangaliso Wetland Park World Heritage Site	1 July 2014	Mark Hamann & Col Limpus	Mark Hamann	Acceptance of the proposal, without need for further revision (apart from Secretariat editorial corrections).
3	Myanmar: Thameehla Island	5 July 2014	Col Limpus & Manjula Tiwari	Col Limpus	Conditional acceptance of the proposal, subject to the provision of additional information by the proponent within six months of the conclusion of the SS7 meeting; followed by Advisory Committee review and positive recommendation.
4	Islamic Republic of Iran: Sheedvar Island	28 July 2014	Jeff Miller and Ali Al Kiyumi	Jeff Miller	Conditional acceptance of the proposal, subject to the provision of additional information by the proponent within six months of the conclusion of the SS7 meeting; followed by Advisory Committee review and positive recommendation.
5	Seychelles: Aldabra Atoll	11 August 2014	Mark Hamann & Manjula Tiwari	Jack Frazier	Acceptance of the proposal, without need for further revision (apart from Secretariat editorial corrections).
6	Comoros: Itsamia, Mohéli	28 August 2014	Jack Frazier & Manjula Tiwari	Jack Frazier	Conditional acceptance of the proposal, subject to the provision of additional information by the proponent within six months of the conclusion of the SS7 meeting; followed by Advisory Committee review and positive recommendation.
7	United Arab Emirates: Bu Tinah Shoal	30 August 2014	Jeff Miller and Ali Al Kiyumi	Jeff Miller	Conditional acceptance of the proposal, subject to the provision of additional information by the proponent within six months of the conclusion of the SS7 meeting; followed by Advisory Committee review and positive recommendation.

	Proposal	Date submitted	Evaluators	Mentors	Final ranking
8	United Arab Emirates: Sir Bu Na'air	1 September 2014	Jeff Miller and Ali Al Kiyumi	Jeff Miller	Conditional acceptance of the proposal, subject to the provision of additional information by the proponent within six months of the conclusion of the SS7; followed by Advisory Committee review and positive recommendation.
9	France: Europa Island	1 September 2014	Jack Frazier & Manjula Tiwari	Jack Frazier	Conditional acceptance of the proposal, subject to the provision of additional information by the proponent within six months of the conclusion of the SS7 meeting; followed by Advisory Committee review and positive recommendation.
10	Philippines: Turtle Islands Wildlife Sanctuary	2 September 2014			Not assessed – official endorsement not received as at 6 September 2014.

Appendix IX

**RECOMMENDATIONS/LIST OF SUGGESTED ACTIONS EXTRACTED FROM
FINAL REPORT OF THE ADVISORY COMMITTEE
(as at 10 September 2014)**

Note: The numbers in [] refer to paragraph numbers in the Advisory Committee report.

Actor	Topic	Proposed Action
Signatory States	“Overview of IOSEA MoU Implementation” (document MT-IOSEA/SS.7/Doc. 6)	Provide feedback on the points in the table in Part I: 1. Descriptions of exemplary approaches; 3. Adverse incentives; 14. Critical review of management programmes; 20. Analysis of international flipper tag data; 24. Species assessment (for green turtles); 26. Standardisation/harmonisation of methods; 27. Review of education/awareness initiatives; 28. Alternative livelihood opportunities; 36. Training effectiveness and synergy [6].
	Collaborative research and management	Data collection should be intensified through regional collaboration, and technical support offered to less developed countries, as well as through partnerships with five recognised genetics laboratories [7].
		Genetics work could be linked more closely with the Species Assessments and the Site Network process, which could help to identify index beaches and priority foraging areas [7].
	Identification of genetic characteristics of the nesting populations (document MT-IOSEA/SS.7/Doc. 10.2)	Signatory States should prioritize which genetic stocks need identification at nesting and foraging areas and, where possible, on the high seas; [8] The species assessments & site network process should inform the prioritization of genetic analysis of populations [8].
	Leatherback Assessment (document MT-IOSEA/SS.7/Inf.10)	Consider four actionable project concepts proposed by the AC [10]: <ul style="list-style-type: none"> - In Sri Lanka, where monitoring and sampling is needed; - In places where there is egg relocation and hatcheries (particularly in Malaysia and Thailand); - In places where coastal management practices (e.g., dune stabilization) are of concern; - In Indonesia, where there is poorly documented widespread, low density nesting (Annex 4).
	Loggerhead Assessment (document MT-IOSEA/SS.7/Inf.11)	Consider three project proposals from the AC [10]: <ul style="list-style-type: none"> - Elucidate hatchling production rates and post-hatchling dispersal in the Indian Ocean; - Elucidate nesting activity on Socotra Island (Yemen), mainland Oman, and Sri Lanka - Elucidate vulnerability of nesting beaches in the IOSEA region (Annex 5)
IOSEA Site Network (document MT-IOSEA/SS.7/Doc. 7)	Engage in a constructive discussion at the SS7 Meeting of the challenges faced by Focal Points in meeting their collective commitments [13].	
	Undertake, with support of mentors from the AC, any necessary revision of their proposal, during or after the Signatory State meeting [17].	
	Periodic review of Network Sites: It was proposed that this discussion, including consideration of a reporting template for network sites, be taken up at the next Meeting of Signatory States (SS8) [18].	

Actor	Topic	Proposed Action
Signatory States	IOSEA Site Network (document MT-IOSEA/SS.7/Doc. 7)	Signatories proposing sites with small but significant nesting populations (in terms of management units) should invest efforts in developing complementary arguments to justify the inclusion of such sites in the IOSEA Site Network [19].
		Engage actively in the establishment of a steering committee to seek financial support in the months following the meeting [21].
		Observer from the United States offered to investigate, within her own organisation (NOAA), the possibility of collaborating with IOTC/IOSEA in delivery of technical support, such as marine turtle-related observer training [22].
	Bycatch mitigation (document MT-IOSEA/SS.7/Doc. 10.4)	Begin addressing by-catch issues in the countries and locations that are identified as priority areas in the species assessments [23].
	Technical Support /Capacity-building programme (document MT-IOSEA/SS.7/Doc. 8)	The sub-regional consultations of the Meeting of Signatory States would be an appropriate forum for identifying technical support / capacity-building needs in IOSEA Signatory States [27].
	Standardisation / harmonisation of technical terms, protocols, methods, reporting, etc.	Any data collection project conducted in the region should report rigorously on the methodology followed, whatever the method chosen among the many options available [29].
Advisory Committee	Illegal take and trade (document MT-IOSEA/SS.7/Doc. 10.1)	Give more consideration to the issue of marine turtle poaching and trade in the Site Network proposal evaluation process (one way to achieve this would be to request more explicit mention of turtle exploitation and poaching in the section pertaining to threats affecting marine turtles in the vicinity of the site, and to revise the evaluation criteria accordingly) [9].
	Leatherback (document MT-IOSEA/SS.7/Inf.10) and loggerhead (document MT-IOSEA/SS.7/Inf.11) assessments	The next IOSEA assessment should focus on hawksbill turtles. Drs. Limpus, Hamann and Miller volunteered to form a committee to take the work forward intersessionally [11].
	IOSEA Site Network (document MT-IOSEA/SS.7/Doc. 7)	‘Mentors’ from among the members present for each Site Network proposed, to provide feedback to proponents to help them strengthen their proposals during and/or after IOSEA SS7. <i>(Advisory assistance should be offered to proponents during the completion phase of the Site Information Sheets, but such “pre-submission” mentors should serve only as resource persons and not be involved in the writing of the proposal.)</i> [15].
	Bycatch issues (document MT-IOSEA/SS.7/Doc. 10.4)	Enhance IOSEA’s involvement in by-catch mitigation efforts, for instance by contributing papers to the IOTC’s Working Party on Ecosystems and Bycatch (WPEB) [22].
		Consider favourably IOTC requests for technical advice, subject to financial support and availability [22].

Actor	Topic	Proposed Action
Advisory Committee	Technical Support / Capacity-building Programme (document MT-IOSEA/SS.7/Doc. 8)	Site Network mentors to help proponents identify where the IOSEA Technical Support / Capacity-building Programme could address training needs at their site, as well as help articulate more precisely their actual resource requirements [26].
		Recognise and give credit to the training programmes already existing throughout the IOSEA region and to support these, through promotion of greater collaboration throughout the region [27].
		Propose options to Signatories where they were needed and requested [27].
	Standardisation / harmonisation of technical terms, protocols, methods, reporting, etc.	Take note of discrepancies or inconsistencies observed in the descriptions provided in Site Network proposals being reviewed [29].
		A glossary of standardised terms might be prepared for inclusion in the IOSEA website. Keep under review issue of standardisation/harmonisation [29].
	General	Make use of and inter-link IOSEA initiatives, such as site-based information, species assessments, and site network proposals [31].
		Recognise the common lack of basic information and insure the availability of up-to-date, credible information [31].
		Ensure that spatial, temporal, and organisational/institutional scales are clear; strive for quality control [31].
		Promote and optimise cooperation at various levels (local, national, bi-national, sub-regional, regional, and beyond) – for example, with the Indian Ocean Tuna Commission [31].
		Follow-up on and evaluate various initiatives; show-case the relevance of IOSEA initiatives to those of other programmes [31].
Involve a responsive Advisory Committee in advising at various levels of IOSEA initiatives [31].		
Secretariat	Help identify genetic characteristics of the nesting populations	Assist countries with contact addresses for applying for CITES permits [8]; The Advisory Committee will assist Signatories with contacts for laboratories specializing in sea turtle genetics [8].
	Illegal take and trade (document MT-IOSEA/SS.7/Doc. 10.1)	Try to raise the profile of marine turtle trade issues among intergovernmental organisations / networks that focus on other aspects of wildlife crime and to collaborate more closely with CITES, ASEAN-WEN and TRAFFIC [9].
		Give more visibility to marine turtle trade issues on the IOSEA website, for example by posting announcements on meetings organised by CITES and TRAFFIC, and featuring exemplary legislative/enforcement actions carried out by Signatory States [9].
		Update the existing paper, which could serve as an entry point to the topic, and submit it to CITES COP17, to be held in South Africa in 2016 [9].
		The observer from the United States noted that the Secretariat of the Inter-American Sea Turtle Convention was already collaborating closely with CITES; a joint approach with IOSEA could be productive [9].

Actor	Topic	Proposed Action
Secretariat	Leatherback (document MT-IOSEA/SS.7/Inf.10) and Loggerhead (document MT-IOSEA/SS.7/Inf.11) assessments	Seek funding from other partner organisations such as NGOs [10].
	IOSEA Site Network (document MT-IOSEA/SS.7/Doc. 7)	Site Network information materials such as the template, evaluation criteria and website page might benefit from repackaging as to make them more attractive to potential donors [16]. The Secretariat reiterated its commitment to undertake editorial revisions of the submitted proposals to correct linguistic or organisational deficiencies, without affecting their substance, prior to their publication on the IOSEA website [16].
	Bycatch issues (document MT-IOSEA/SS.7/Doc. 10.4)	Improve the visibility of by-catch issues by making use of opportunities offered by the IOSEA website. This could be achieved by adding a section on by-catch on the home page (including an updated version of Doc 10.4.) and linking to relevant videos and other information material produced by other organisations (for example in Australia and the United States) [24].
	Standardisation/ harmonisation of technical terms, protocols, methods, reporting, etc.	Supplement the existing links to various conservation/ management manuals already contained in the Electronic Library of the IOSEA website [29].

ANNEX 8: ACTION POINTS ARISING FROM THE SEVENTH MEETING OF SIGNATORY STATES

Sorted by actor

Actor	Topic	Proposed Action	Timeframe
Advisory Committee	Site Network	Conduct training and offer management advice at Network sites, through Advisory Committee mentorship.	Inter-sessional
Advisory Committee, Signatory States (Comoros, Myanmar, Islamic Republic of Iran, Philippines, United Arab Emirates)	Site Network	Identified states to make amendments to site network submissions within six months of the conclusion of IOSEA SS7, through Advisory Committee mentorship.	Inter-sessional
Advisory Committee, Secretariat	Capacity Building	Respond to specific requests for capacity-building support from Tanzania (regarding preparation of a national sea turtle conservation strategy) and from Madagascar (for scientific personnel involved in marine turtle conservation).	
Advisory Committee, Secretariat	Genetics	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.	Inter-sessional
Advisory Committee, Secretariat	Species: Hawksbill	Initiate the next species assessment, for hawksbill turtles, with a view to tabling a draft at IOSEA SS8.	2017
Advisory Committee, Signatory States	Capacity Building	Assess and advise on hatchery management practice (e.g. Maldives and Sri Lanka) and assess hawksbill hatchery production success in Indonesia and Philippines, as appropriate.	
Secretariat	Illegal take and trade	Use the existing paper MT-IOSEA/SS.7/Doc. 10.1 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).	2016
Secretariat	IOSEA Website and Tools	Consider updating the existing online reporting tool (potentially to be integrated with other CMS reporting tools).	Ongoing

Actor	Topic	Proposed Action	Timeframe
Secretariat, Advisory Committee	Environmental Impact Assessment	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 analyse how EIA processes are implemented in each country.	Inter-sessional
Secretariat, Advisory Committee	Fisheries Interactions	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	Fisheries Interactions	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	Site Network	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, SEA+ Signatory States, Advisory Committee	Sub-regional coordination	Facilitate an intersessional discussion among SEA+ countries to determine the scope of a regional workshop to synthesise existing regional information and identify gaps. Secretariat, Advisory Committee to assist SEA+ members to synthesize information from existing projects, reports, literature (e.g. of IOSEA, CMS, ASEAN/SEAFDEC, etc) as inputs to the workshop.	2015
Secretariat, Signatory States (NWIO)	Fisheries Interactions	Keep Signatory States up to date about developments in relation to proposed sub-regional by-catch assessment project (led by CMS Abu Dhabi office) and encourage their involvement.	
Secretariat, Signatory States (SEA+)	Membership	Engage SEA+ non-Signatory States (e.g. China, Korea, Timor Leste, and Japan) to sign the IOSEA MoU. Signatory States to engage them at relevant forums to encourage them to attend the IOSEA MoU meetings and related events, as appropriate.	Ongoing

Actor	Topic	Proposed Action	Timeframe
Secretariat, Signatory States, Advisory Committee	IOSEA Website and Tools	Consider conducting training about IOSEA online tools and national report completion via webinars.	Inter-sessional
Signatory State (Comoros)	Capacity Building	Comoros to draft a 1-2 page description of Moheli-based activities as an example of an exemplary approach called for in document MT-IOSEA/SS.7/Doc. 6, para. 1.	
Signatory State (Oman)	Fisheries Interactions	Share methods and lessons learnt from current studies on fisheries interactions	2015
Signatory State (Sri Lanka)	Species: Loggerhead	Assess and monitor loggerhead nesting activity along the eastern and western coasts of Sri Lanka	
Signatory State (Thailand), Secretariat	Sub-regional coordination	Consider hosting and organising a SEA+ sub-regional meeting, upon written request from the Secretariat. Thailand to consider providing support for ASEAN countries.	2016
Signatory State (United Arab Emirates)	Socio-economic work	Environment Agency Abu Dhabi (EAD) to share with NWIO members methods and lessons learnt from its socio- economic survey of fishers.	Inter-sessional
Signatory State (United Arab Emirates), Secretariat	Sub-regional coordination	Consider hosting and organising a NWIO sub-regional meeting, upon written request from the Secretariat.	
Signatory State (USA)	Fisheries Interactions	United States (NOAA) to investigate the possibility of collaborating with IOTC/IOSEA in delivery of technical support, such as marine turtle-related observer training.	
Signatory States	Capacity Building	Investigate potential opportunities for sub-regional capacity building / technical workshops, particularly in NWIO and NIO, including involvement of Advisory Committee.	2015
Signatory States	Fisheries Interactions	Initiate/continue dialogue about IOSEA issues among Signatory States that are also IOTC members in advance of each meeting of IOTC meeting (including subsidiary bodies), and intervene as appropriate.	
Signatory States (Australia, Indonesia, Papua New Guinea, United States)	Species: Hawksbill	Work together to develop proposal to address to the threats to hawksbills on key foraging grounds in range states.	Oct-15

Actor	Topic	Proposed Action	Timeframe
Signatory States (France, Oman, South Africa)	Species: Loggerhead	Publicise the outcomes of a study of hatchling dispersal and the impacts of climate change on loggerhead sex ratios (so-called COCA LOCA project).	
Signatory States (Mozambique, South Africa)	Habitat Rehabilitation	Assess the extent of use and impacts of exotic vegetation to stabilize beach/dune systems; 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. NB. a post-doc on dune stabilisation is already underway in South Africa.	
Signatory States (NWIO)	Genetics	Countries to incorporate genetic sampling into their ongoing monitoring activities (subject to budget and resources available).	Inter-sessional
Signatory States (NWIO), Advisory Committee	Capacity Building	Identify current challenges/gaps (e.g. regarding standardisation of data collection and protocols) and explore opportunities for potential regional training and further coordination	Inter-sessional
Signatory States (SEA+)	Genetics	Each SEA+ country should identify the gaps in genetic information, beginning with nesting beach-related genetics; and endeavour to submit haplotype information to genetic banks and to share sequenced data, particularly for hawksbill genetics.	Ongoing
Signatory States (WIO)	Genetics	Extend genetics work on green, loggerhead and hawksbill turtles, which has been initiated but not yet completed.	
Signatory States (WIO)	Socio-economic work	Implement the WIO-MTTF Action Plan for three socio-economic workshops.	2015-2016
Signatory States, Secretariat, Advisory Committee	Illegal take and trade	Establish a working group to address issues related to turtle trade.	
Signatory States, Secretariat, Advisory Committee	Site Network	Establish a steering committee to seek financial support for the IOSEA Site Network in the months following the meeting [Membership to include: Australia, Mauritius, Oman, Seychelles, Thailand, United Kingdom, United States, Advisory Committee (Nel), Secretariat].	

Actor	Topic	Proposed Action	Timeframe
Signatory States (SEA+)	Genetics	Each SEA+ country should identify the gaps in genetic information, beginning with nesting beach-related genetics; and endeavour to submit haplotype information to genetic banks and to share sequenced data, particularly for hawksbill genetics.	Ongoing
Signatory States (WIO)	Genetics	Extend genetics work on green, loggerhead and hawksbill turtles, which has been initiated but not yet completed.	
Signatory States (WIO)	Socio-economic work	Implement the WIO-MTTF Action Plan for three socio-economic workshops	2015-2016
Signatory States, Secretariat, Advisory Committee	Illegal take and trade	Establish a working group to address issues related to turtle trade.	
Signatory States, Secretariat, Advisory Committee	Site Network	Establish a steering committee to seek financial support for the IOSEA Site Network in the months following the meeting [Membership to include: Australia, Mauritius, Oman, Seychelles, Thailand, United Kingdom, United States, Advisory Committee (Dr. Nel), Secretariat].	

Sorted by topic

Actor	Topic	Proposed Action	Timeframe
Signatory State (Comoros)	Capacity Building	Comoros to draft a 1-2 page description of Moheli-based activities as an example of an exemplary approach called for in document MT-IOSEA/SS.7/Doc. 6, para. 1.	
Advisory Committee, Secretariat	Capacity Building	Respond to specific requests for capacity-building support from Tanzania (regarding preparation of a national sea turtle conservation strategy) and from Madagascar (for scientific personnel involved in marine turtle conservation).	
Advisory Committee, Signatory States	Capacity Building	Assess and advise on hatchery management practice (e.g. Maldives and Sri Lanka) and assess hawksbill hatchery production success in Indonesia and Philippines, as appropriate.	
Signatory States	Capacity Building	Investigate potential opportunities for sub-regional capacity building / technical workshops, particularly in NWIO and NIO, including involvement of Advisory Committee.	2015
Signatory States (NWIO), Advisory Committee	Capacity Building	Identify current challenges/gaps (e.g. regarding standardisation of data collection and protocols) and explore opportunities for potential regional training and further coordination.	Inter-sessional
Secretariat, Advisory Committee	Environmental Impact Assessment	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 analyse how EIA processes are implemented in each country.	Inter-sessional
Secretariat, Advisory Committee	Fisheries Interactions	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	Fisheries Interactions	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.	

Actor	Topic	Proposed Action	Timeframe
Secretariat, Signatory States (NWIO)	Fisheries Interactions	Keep Signatory States up to date about developments in relation to proposed sub-regional by-catch assessment project (led by CMS Abu Dhabi office) and encourage their involvement.	
Signatory State (Oman)	Fisheries Interactions	Share methods and lessons learnt from current studies on fisheries interactions.	2015
Signatory State (USA)	Fisheries Interactions	United States (NOAA) to investigate the possibility of collaborating with IOTC/IOSEA in delivery of technical support, such as marine turtle-related observer training.	
Signatory States	Fisheries Interactions	Initiate/continue dialogue about IOSEA issues among Signatory States that are also IOTC members in advance of each meeting of IOTC meeting (including subsidiary bodies), and intervene as appropriate.	
Advisory Committee, Secretariat	Genetics	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.	Inter-sessional
Signatory States (NWIO)	Genetics	Countries to incorporate genetic sampling into their ongoing monitoring activities (subject to budget and resources available).	Inter-sessional
Signatory States (SEA+)	Genetics	Each SEA+ country should identify the gaps in genetic information, beginning with nesting beach-related genetics; and endeavour to submit haplotype information to genetic banks and to share sequenced data, particularly for hawksbill genetics.	Ongoing
Signatory States (WIO)	Genetics	Extend genetics work on green, loggerhead and hawksbill turtles, which has been initiated but not yet completed.	
Signatory States (Mozambique, South Africa)	Habitat Rehabilitation	Assess the extent of use and impacts of exotic vegetation to stabilize beach/dune systems; 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. NB. a post-doc on dune stabilisation is already underway in South Africa.	

Actor	Topic	Proposed Action	Timeframe
Secretariat	Illegal take and trade	Use the existing paper MT-IOSEA/SS.7/Doc. 10.1 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).	2016
Signatory States, Secretariat, Advisory Committee	Illegal take and trade	Establish a working group to address issues related to turtle trade.	
Secretariat	IOSEA Website and Tools	Consider updating the existing online reporting tool (potentially to be integrated with other CMS reporting tools).	Ongoing
Secretariat, Signatory States, Advisory Committee	IOSEA Website and Tools	Consider conducting training about IOSEA online tools and national report completion via webinars.	Inter-sessional
Secretariat, Signatory States (SEA+)	Membership	Engage SEA+ non-Signatory States (e.g. China, Korea, Timor Leste, and Japan) to sign the IOSEA MoU. Signatory States to engage them at relevant forums to encourage them to attend the IOSEA MoU meetings and related events, as appropriate.	Ongoing
Advisory Committee	Site Network	Conduct training and offer management advice at Network sites, through Advisory Committee mentorship.	Inter-sessional
Signatory States (Comoros, Myanmar, Islamic Republic of Iran, Philippines, United Arab Emirates), Advisory Committee	Site Network	Make amendments to site network submissions within six months of the conclusion of IOSEA SS7, through Advisory Committee mentorship.	Inter-sessional
Secretariat, Advisory Committee	Site Network	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.	
Signatory States, Secretariat, Advisory Committee	Site Network	Establish a steering committee to seek financial support for the IOSEA Site Network in the months following the meeting [Membership to include: Australia, Mauritius, Oman, Seychelles, Thailand, United Kingdom, United States, Advisory Committee (Nel), Secretariat].	
Signatory State (United Arab Emirates)	Socio-economic work	Environment Agency Abu Dhabi (EAD) to share with NWIO members methods and lessons learnt from its socio-economic survey of fishers.	Inter-sessional

Actor	Topic	Proposed Action	Timeframe
Signatory States (WIO)	Socio-economic work	Implement the WIO-MTTF Action Plan for three socio-economic workshops.	2015-2016
Advisory Committee, Secretariat	Species: Hawksbill	Initiate the next species assessment, for hawksbill turtles, with a view to tabling a draft at IOSEA SS8.	2017
Signatory States (Australia, Indonesia, Papua New Guinea, United States)	Species: Hawksbill	Work together to develop proposal to address to the threats to hawksbills on key foraging grounds in range states.	Oct-15
Signatory State (Sri Lanka)	Species: Loggerhead	Assess and monitor loggerhead nesting activity along the eastern and western coasts of Sri Lanka.	
Signatory States (France, Oman, South Africa)	Species: Loggerhead	Publicise the outcomes of a study of hatchling dispersal and the impacts of climate change on loggerhead sex ratios (so-called COCA LOCA project).	
Secretariat, SEA+ Signatory States, Advisory Committee	Sub-regional coordination	Facilitate an intersessional discussion among SEA+ countries to determine the scope of a regional workshop to synthesize existing regional information and identify gaps. Secretariat, Advisory Committee to assist SEA+ members to synthesize information from existing projects, reports, literature (e.g. of IOSEA, CMS, ASEAN/SEAFDEC, etc) as inputs to the workshop.	2015
Signatory State (Thailand), Secretariat	Sub-regional coordination	Consider hosting and organising a SEA+ sub-regional meeting, upon written request from the Secretariat. Thailand to consider providing support for ASEAN countries.	2016
Signatory State (United Arab Emirates), Secretariat	Sub-regional coordination	Consider hosting and organising a NWIO sub-regional meeting, upon written request from the Secretariat.	