

Detailed Analysis of IOSEA Marine Turtle MoU National Reports

Prepared by the IOSEA Marine Turtle MoU Secretariat, based on data contained in the Online Reporting Facility as of 31 January 2005

1 March 2005

Introduction

On 22 October 2004, the Secretariat announced that it would prepare a preliminary, detailed assessment of reporting and implementation based on information contained in the IOSEA Online Reporting Facility as of early November 2004. The aim of that preliminary review¹, which was circulated to Signatory States and the Advisory Committee on 23 December 2004, was to give Signatory States an opportunity to consider the initial findings and to revise their reports accordingly, prior to the final deadline for submission of national reports, on 31 January 2005.

The Online Reporting Facility permits Signatory States to update their reports at any time. It is possible that some countries may have submitted more recent information (i.e. updated their online reports during February 2005), but this has not been reflected in the present analysis. There are currently 18 reports from Signatory States in the national report database, in various degrees of completeness. About two-thirds of these Signatories have requested a password to enable them to update their reports online.

In Part I, a synopsis has been prepared for each of the approximately 100 discrete activities (questions) contained in the national report template, derived from the Conservation and Management Plan. The percentage of Signatory States reporting on each activity is indicated. Signatory States can observe whether or not they are among those having responded to a particular question; and whether their report is lacking information in any respect, and in need of completion or adjustment.

Each synopsis mentions commonalities (i.e. general trends/themes) among the responses. Specific reference is made to noteworthy responses, as well as exemplary activities and practices. For some questions, the overall quality of information and level of detail provided is commented on. A synopsis may also indicate where a respondent has interpreted a question differently from the other Signatories, in a way that was not intended, to enable the respondent to adjust the answer accordingly. Any obvious difficulties that respondents appear to have had in answering a question (i.e. where a question appears to have been misunderstood) are mentioned and remedial action is proposed.

For most but not all questions, general recommendations to improve reporting are given where this is warranted. These recommendations – which may include rewording a question, consolidating a number of related questions, or deleting a question entirely from the reporting template – are the object of a separate conference paper (Document MT-IOSEA/SS.3/Doc. 7.1).

In Parts II, III and IV, basic summaries are given of the available data on species distribution and habitat type, as well as threats and mitigation measures. Bearing in mind the preliminary nature of some of the data, caution must be exercised in any interpretation that might be attempted

This analysis is made available as a MS-Word document to make it easy for anyone to search on a specific keyword (such as a country name), in order to see where that keyword is mentioned throughout the document.

¹ The Secretariat acknowledges with appreciation the assistance provided by Ms. Manjula Tiwari in carrying out the basic statistical and other research needed for the preparation of these findings.

PART I: SYNOPSIS BY ACTIVITY

OBJECTIVE I: REDUCE DIRECT AND INDIRECT CAUSES OF MARINE TURTLE MORTALITY

1.1 List by name those nesting beaches, feeding grounds, and developmental habitats that are important for marine turtles in your country. Indicate geographic coordinates if possible.

Information is available from 90% (n=18) of the Signatory States. The Signatory States that have not reported are Myanmar and United Republic of Tanzania.

The amount of information provided varies in detail from country to country – with some Signatories listing specific areas and others naming much larger geographic areas. Very few have provided coordinates, and many place names are not specific enough to allow for precise identification.

The presentation is inconsistent, possibly because the query did not specify a particular format. A few countries (e.g., Cambodia, Comoros, Kenya, Mauritius, Philippines, Thailand, United Kingdom) have listed their important turtle areas by category (nesting, feeding, developmental habitat) as requested – albeit not explicitly – by the query. It would be very useful if all other countries also separated their locations into these three categories. It would also be helpful to indicate whether data are presently not available for some habitat types (e.g., as Kenya has done), or whether these habitats do not exist at all in the country.

Some countries have indicated which species are found at certain locations (e.g. Philippines, Thailand), however this information should be supplied in the separate data sheets for each site. Seychelles provided a supporting map (which the online reporting system could not accommodate), but it should also describe the areas in the text of its report. In future, links to supporting maps for each country with the important areas highlighted would be extremely useful for those unfamiliar with the locations. The information provided by United Kingdom could be made more succinct, and information that does not directly address the query could be deleted (e.g., numbers of turtles nesting, threats, etc.). Additional information on nesting season, local names of turtles, and/or the Red List status provided by Cambodia and Viet Nam does not directly address the query.

In general, it is often unclear from the responses whether the sites included all considered to be “important” areas, as requested by the query, or whether some areas where even a few turtles occur have been listed. In other words, the question does not adequately differentiate the relative importance of a given site.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The question should be restructured so that Signatories provide habitat information according to the three categories: nesting, feeding, and developmental. Signatories should indicate whether certain habitat types are known not to exist, or whether data are simply not available. The Secretariat will investigate whether it would be technically possible for countries to provide an explanatory map; and consider adding a scale to indicate relative importance of a given site. With few exceptions, all Signatories need to describe the site locations more precisely.

When data are available, the question might request the source of the information (for example: Cambodia has indicated that its known turtle areas have been identified by fishermen and authorities. A tabular reporting format for this question would remove some of the problems in responding and would make the information more reader-friendly.

1.2.1 Describe any protocol or approaches for conserving and managing marine turtle populations which you consider to be exemplary and suitable for adaptation and adoption elsewhere.

Information was provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Myanmar, United Kingdom, and United Republic of Tanzania.

All Signatory States (17 Signatory States = Australia, Bangladesh, Cambodia, Comoros, Islamic Republic of Iran, Jordan, Kenya, Madagascar, Mauritius, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United States, Viet Nam) that reported describe some protocol or approach they use, are developing, or need to develop. However, it often appears that a country is simply listing all its protocols and approaches and not just the few exemplary approaches that should be considered for adaptation and adoption elsewhere. Additionally, a few countries have listed only general categories of programmes without providing any detailed information (e.g., Comoros, Madagascar, Mauritius), or have listed all the national and international instruments signed (e.g. Viet Nam).

More than 50% of the Signatory States indicate community involvement/participation as an important approach for conserving and managing marine turtle populations. People involvement/interaction appears to be essential in most places, except for United States where poaching is reportedly not a problem.

Some countries have indicated protocols and approaches they follow, and others have not. In general, the level of detail provided varies among countries. The comprehensive National Recovery Plan developed by Australia and the standardized index site monitoring protocols developed by United States should be encouraged in other countries to formalize existing and planned protocols and provide structure to conservation and management practices.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The intent of this question was to allow Signatories to describe, in ample detail, a few exemplary approaches that had proven to be particularly effective, rather than itemizing many varied activities (or even just a few) without giving much detail. The question should make it clear that further elaboration is requested, to enable the reader to judge whether a particular approach might be worth pursuing.

1.2.2 Which best practice approaches has your country adapted and/or adopted with success?

Information was provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Republic of Tanzania, and United States.

Most Signatory States (14 Signatory States = Australia, Bangladesh, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Mauritius, Pakistan, Philippines, Sri Lanka, Thailand, United Kingdom, Viet Nam) have indicated some successful best practice approaches; however, it is unclear whether they have been adapted and/or adopted from “elsewhere” as requested by the query. Seychelles responded that it had not adopted any programme from “elsewhere”, but its response to Question 1.2. 1 does mention a series of approaches. Information is not yet available from Oman.

This question is not clearly differentiated from 1.2.1 some responses are similar and a couple of countries refer to their response to 1.2.1. The intent of this question was to seek information about approaches that had been adopted/adapted from elsewhere and that had proven effective in another context.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

As this question is clearly susceptible to misinterpretation, it is recommended that Questions 1.2.1 and 1.2.2 be combined and reworded.

1.3.1 Describe any socio-economic studies that have been conducted among communities that interact with marine turtles and their habitats.

Information was provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, Oman, and United Republic of Tanzania.

Most Signatory States (10 Signatory States = Australia, Comoros, Islamic Republic of Iran, Kenya, Pakistan, Philippines, Seychelles, Thailand, United States, Viet Nam) have conducted or are conducting some socio-economic study or activity, with the exception of Cambodia, Madagascar, Mauritius, and United Kingdom. Cambodia's response to the question was "not applicable", whereas interaction with fishermen was described in its response to an earlier question. Madagascar indicated that it has not undertaken any socio-economic study, but in the previous question it indicated some community-based approaches. Mauritius has not undertaken any socio-economic studies. The issue was said not to be applicable to United Kingdom because of the lack of permanent inhabitants in the territory. Thailand expressed uncertainty whether some of the socio-economic issues listed had been undertaken in the country. Bangladesh indicated that these studies have yet to be done, but some community-based approaches are described in response to the previous question. Sri Lanka's response is unclear.

The level of detail provided varies among countries, ranging from detailed explanations given by some countries (e.g., Philippines, Seychelles) to just the mention, but no description, of the studies done. The study described by Philippines has provided some interesting and important results, indicating the value of these studies.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

In general, reporting of this important activity is weak. More detail is needed both of the nature of the studies undertaken and the results obtained, by those Signatory States that have reported. Other Signatories should at least indicate whether or not such studies have been conducted. The question might also be broadened to request information on socio-economic "activities", rather than just "studies".

1.3.2 Which economic incentives are in need of modification in your country in order to reduce threats to and mortality of marine turtles?

Information was provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Australia, Jordan, Myanmar, Thailand, and United Republic of Tanzania.

Of the 15 Signatory States that responded to this question, nine (Bangladesh, Comoros, Islamic Republic of Iran, Kenya, Pakistan, Philippines, Seychelles, Sri Lanka, Viet Nam) mention economic incentive modifications that would help reduce mortality of marine turtles. These incentives vary among countries, and range from reduction in the price of regular meat, income-generating activities to reduce poverty, alternative livelihoods, income from turtle tourism, banning the use of eggs in traditional medicine, and compensation for fishermen whose nets have been damaged. Mauritius describes current activity, but does not indicate whether or what modifications might be necessary to existing incentives.

The question was considered "not applicable" by Cambodia and United Kingdom; and United States indicated that it takes a more regulatory approach. Some countries appear to have misinterpreted the question and described current economic benefits being provided or emphasized prohibition of egg sales and turtle harvesting, and other general activities that would reduce mortality of marine turtles. Oman was still awaiting information from the Fisheries Department. Only Madagascar indicated that no economic incentives have been implemented.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

In general, this question has not been answered in depth by any of the Signatories. It was meant to elicit information on the underlying causes of threats to and mortality of marine turtles (e.g. high prices earned from turtle products relative to other food commodities; lack of affordable alternatives; ease of access to the turtle resource; readily available inexpensive land close to nesting beaches, to give just some examples). It might be useful to develop a generic list of these underlying causes and rework this question using a menu approach. The query should also allow those countries that feel their economic incentives do not require modification to provide details of the adequacy of these approaches.

1.3.3 Describe any progress made towards implementing modifications to these economic incentives as well as resources needed and already secured for their implementation.

Information was provided by 65% (n=13) of the Signatory States. The Signatory States that have not reported are: Australia, Islamic Republic of Iran, Jordan, Myanmar, Thailand, United Republic of Tanzania, and United States.

Of the 13 Signatory States that responded to this question, only 5 (Kenya, Pakistan, Philippines, Seychelles, and Sri Lanka) have described some efforts being made towards implementing modifications to these economic incentives. The efforts described include proposals and programmes being developed, consultations underway, and the launch of income generating schemes. Kenya indicated that the issue has been a subject of debate. Oman is awaiting information about this issue from its Fisheries Department. Many of the countries have not described any progress. Some of the reasons include: it is “not applicable” (Cambodia, United Kingdom), lack of political will (Comoros), “does not arise” (Mauritius), and simply the lack of implementation (Madagascar). Sri Lanka’s response (in Parts c and d) is unclear.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

In general, this question has not been answered in depth by any of the Signatories – at least not to the extent of reporting in detail on practical approaches that have shown some measure of success – though various options are raised at least superficially (also in response to Question 1.3.1). This question might best be combined with 1.3.2.

1.4.1 Which gear, devices and techniques have been developed and/or are used in your country to minimize incidental capture of marine turtles?

Information was provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, Sri Lanka, and United Republic of Tanzania.

Of the 15 Signatory States that responded, more than half (9 Signatory States = Australia, Bangladesh, Comoros, Kenya, Madagascar, Pakistan, Thailand, United States, Viet Nam) indicated development or use of devices that allow the escape of marine turtles. The following countries are not reported to have implemented these devices: Cambodia, Mauritius, Oman, Philippines, Seychelles, and United Kingdom.

Fewer Signatory States (6 Signatory States = Australia, Comoros, Madagascar, Seychelles, United States, Viet Nam) indicated spatial closure of fishing activities as a management tool to minimize incidental capture of marine turtles. The following countries have not introduced spatial closure of fishing activities: Bangladesh, Cambodia, Kenya, Mauritius, Oman, Pakistan, Philippines, Thailand, and United Kingdom.

Very few Signatory States, (4 Signatory States = Australia, Pakistan, United States, Viet Nam) indicated seasonal closure of fishing activities as a management tool to minimize incidental capture of marine turtles. The following countries reported no seasonal closure of fishing activities: Bangladesh, Cambodia, Comoros, Kenya, Madagascar, Mauritius, Oman, Philippines, Seychelles, Thailand, and United Kingdom.

Five Signatory States (Australia, Bangladesh, Comoros, Philippines, Seychelles) indicated the introduction of some other measure, including: closure of beaches to vehicle traffic in some areas, release of turtles by fishermen, observation, banning of mechanized fishing, and banning of drift nets. Viet Nam indicated its intention to switch from J-hooks to circle hooks. The following countries did not report any “other” activities to minimize incidental capture: Cambodia, Kenya, Madagascar, Oman, Pakistan, Thailand, United Kingdom, and United States. Mauritius clarified that “no fishing takes place” in its waters.

In summary, more than half of the Signatory States have developed some gear, device and/or technique to minimize incidental capture of marine turtles. Only Australia, United States and Viet Nam have devices that allow escape of marine turtles, as well as spatial and seasonal closure of fishing activities.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Before more meaningful observations can be drawn, reporting under this item may need to be improved, both in terms of the number of Signatories reporting and the level of detail provided. It would be useful to allow Signatory States to specify more precisely what devices are in use, and to comment on their experience in using these devices, or difficulties in introducing them, as the case may be, and the length of time it took them to implement these devices. It may be appropriate also to distinguish between the development and actual use of a particular device or technique, which the current questionnaire does not do.

1.4.2 Describe in more detail any initiatives undertaken with fisheries industries and fisheries management organisations to implement mitigation measures in national waters and on the high seas.

Information was provided by 70% (n=14) of the Signatory States. The Signatory States that have not reported are: Comoros, Jordan, Myanmar, Oman, Thailand, and United Republic of Tanzania.

Most of the Signatory States have undertaken initiatives with fisheries industries and management organisations to implement mitigation measures. However, the extent to which these initiatives have been undertaken varies among countries. Australia appears to be most advanced in this regard, having worked collaboratively to, among other things: adopt a National Policy on Fisheries Bycatch, develop bycatch action plans, techniques and codes of practice, implement seasonal and permanent closures, undertake education and outreach, implement an observer programme in some fisheries, and undertake work on marine debris.

Most other Signatory States have some level of cooperation with fisheries departments or organisations, although not all report explicitly on the nature of the interaction. The activities reported include: encouraging fishermen to release turtles, implementing initiatives to use TEDs, acquisition of monitoring equipment, establishing observer programmes, enforcing laws, banning destructive techniques, regulating fishing, and establishing protected areas. In Cambodia, Mauritius, and Seychelles, the issue of fisheries interactions is reported to be either “not applicable” or not of major concern.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Although the number of Signatories reporting could be much improved, several countries have attempted to describe the nature of the collaboration with agencies responsible for fisheries management. In most instances, these interactions could be elaborated in more detail to give a more complete picture of the extent of ongoing collaboration. It would be useful if each country indicated whether initiatives implemented applied to national waters and/or high seas.

1.4.3 Describe any procedures or training programmes developed to promote implementation of these measures (e.g. vessel monitoring systems, inspections, on-board observer programmes etc.)

[NB: a programming error temporarily prevents the responses to this question from appearing in the Online Report Viewer]

Information was provided by 65% (n=13) of the Signatory States. The Signatory States that have not reported are: Comoros, Islamic Republic of Iran, Jordan, Myanmar, Philippines, Thailand, and United Republic of Tanzania.

Six of the Signatory States that reported (Australia, Kenya, Madagascar, Sri Lanka, United Kingdom, United States) have conducted workshops to educate fishers (Australia); have on-board observer programmes (Madagascar) or vessel monitoring systems/sea inspections (Australia, Kenya, Sri Lanka, United Kingdom); or have conducted training programmes for TEDs and longline practices (United States). Australia, in particular, has implemented a very extensive programme. Pakistan indicated that such measures would be undertaken in the future; information for Oman was being sought. Bangladesh has not yet developed any procedures or training programmes to promote implementation of these measures. Cambodia, Mauritius and Seychelles reported that the need for such procedures or programmes was not applicable in their national context. Viet Nam provided a broad response that did not specifically address the question.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

More than half of the Signatories responded to this question, however, the information provided by most gives only a superficial account of the relevance of the monitoring and training conducted to marine turtle by-catch mitigation. Most likely, there is under-reporting of the measures that have actually been undertaken and, among those reporting, more detailed information could be forthcoming.

1.4.4 Has your country exchanged information and provided technical assistance to other signatory States to promote these activities?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Comoros, Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 15 Signatory States that reported, only Australia and United States have exchanged information and/or provided technical assistance to other Signatory States to promote implementation of by-catch mitigation measures. Australia appears to have done extensive work in exchanging information and providing assistance. United States too is known to have carried out more activities in this regard than have been enumerated. Kenya organized a workshop to facilitate the exchange of information. Philippines reported on information exchange and discussion through SEAFDEC-ASEAN fora. Viet Nam also indicated collaboration within SEAFDEC and other groups.

Most countries (7 Signatory States = Bangladesh, Madagascar, Oman, Pakistan, Seychelles, Sri Lanka, United Kingdom) have apparently not exchanged information with, or provided technical assistance to, other countries in this area. Sri Lanka is reportedly in the process of initiating an exchange programme with India. Mauritius and Cambodia indicated that this activity was “not applicable”, and Thailand expressed uncertainty.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Reporting under this item was rather definitive. Although more Signatories should report on any activities undertaken, the overall characterisation of implementation is likely to remain unchanged.

1.4.5 What measures has your country taken in support of UN General Assembly Resolution 46/215 concerning the moratorium on the use of large-scale driftnets?

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Comoros, Jordan, Myanmar, and United Republic of Tanzania.

Of the Signatory States that reported, more than half (9 Signatory States = Australia, Bangladesh, Madagascar, Mauritius, Philippines, Seychelles, Sri Lanka, United Kingdom, United States) have indicated that partial or complete measures have been introduced to implement the moratorium on the use of large-scale drift nets, notably domestic legislation prohibiting the use of such nets. Sri Lanka is promoting the use of long-line fishing over driftnet fishing. Of the remaining countries, Islamic Republic of Iran and Thailand have no measures in place; Kenya does not know if measures exist; Oman is in the process of implementing measures; Pakistan is still collecting the information; and the issue is “not applicable” in Cambodia. Viet Nam has yet to make its final decision on the use of large-scale driftnets. Although not requested by this query, Viet Nam also indicates that there is no requirement for TEDs on Vietnamese vessels.

1.4.6 Has your country developed and/or implemented net retention and recycling schemes?

Information has been provided by 70% (n=14) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, Thailand, United Republic of Tanzania, and United States.

Very few Signatory States (Australia, Comoros, Philippines, and Viet Nam) have indicated that they have developed or are developing net retention and/or recycling schemes. Australia is in the process of developing mitigation activities in relation to marine debris in the northern and eastern parts of the country and is investigating the potential for recycling nets; substantial governmental funding is supporting these initiatives. Philippines is addressing the issue of discarded crab gill nets. Although Viet Nam has indicated that it has undertaken some efforts, the information is unknown or unavailable.

Five Signatory States (Bangladesh, Kenya, Oman, Seychelles, Sri Lanka) have not developed and/or implemented these schemes. However, both Comoros and Kenya have indicated certain net prohibition laws. The issue is said to be “not applicable” in Cambodia, Mauritius and United Kingdom. Madagascar is uncertain if these schemes had been developed or implemented. Pakistan has yet to collect the information from the concerned agency.

1.4.7 Does your country provide and ensure the use of port facilities for the disposal of ship-borne waste?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, Thailand, United Republic of Tanzania, and United States.

Of the 15 Signatory States that reported, most (9 Signatory States = Australia, Islamic Republic of Iran, Kenya, Madagascar, Mauritius, Oman, Seychelles, Sri Lanka, Viet Nam) have some port facilities that ensure disposal of ship-borne waste, although not all ports in all the countries have these facilities. Australia and Seychelles provide more detail about disposal of different waste products, including garbage, oil and fish scrap. Interestingly, in Viet Nam ship-borne waste is reused by private companies to produce new types of steel. Philippines has a policy in place, but monitoring of compliance is lacking, and discussions are underway to rectify this. Bangladesh, Cambodia and Comoros have no facilities to ensure waste disposal. The issue is “not applicable” to United Kingdom, and Pakistan is still collecting the relevant information from the concerned agency.

1.5.1 Has your country already enacted legislation to prohibit direct harvest and domestic trade in marine turtles, their eggs, parts and products? Please give details, including any exceptions made.

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Almost all of the 15 Signatory States reporting (Australia, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Mauritius, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, United States, Viet Nam) have already enacted some legislation to prohibit direct harvest and domestic trade in marine turtles, their eggs, parts and products, with the sole exception of Bangladesh. Amendment of the Bangladesh Wildlife Act is presently under consideration to include marine turtles.

Almost all the Signatory States, with a few exceptions, list the names of the various laws and legislation, and briefly explain them. Comoros, Islamic Republic of Iran and Pakistan have not provided the titles of the relevant laws, but have explained the significance of the legislation. Oman apparently has enacted legislation, but provided no details. Few Signatory States cite exceptions to the prohibition of direct harvest and trade: Australia makes some exceptions under the Native Title Act and certain exceptions may be made in Mauritius.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Reporting under this item is generally adequate. Those few Signatories that have not provided details of relevant legislation or titles of laws should make the necessary consultations and revise the entries accordingly.

1.5.2 Please indicate the level and the impact of traditional harvest on marine turtles and their eggs. Provide the source of information to make this assessment.

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that responded, very few (two Signatory States = Madagascar, Seychelles) report a high level and impact of traditional harvest. Madagascar cites two references in the literature, while Seychelles provides details on current legal and illegal harvest and impact, export and harvest statistics, and lists a series of publications.

Comoros and Islamic Republic of Iran both indicate modest levels of traditional harvest, with high levels of impact. Comoros' information comes from studies and investigations (details not provided), while Iran's source of information is based on field observations and Marine Environment Bureau reports. Two Signatory States (Kenya and Philippines) report a modest level and impact of traditional harvest. Kenya's information comes from reports, interviews and an ongoing national survey; while Philippines' source of information is the local project.

Three Signatory States (Cambodia, Oman, and Viet Nam) report both low levels and impact of harvest. Cambodia's source of information is local authority reports. Viet Nam lists multiple sources of information: national reports as well as reports from different organisations, research, field and market surveys, questionnaires, and the Fisheries Department. Oman will submit its sources of information at a later date.

Sri Lanka reports low level of harvest with modest impact; no source of information is provided. Bangladesh has indicated low level of harvest with unknown impact; information on harvest level comes from local information and observations.

Pakistan, Thailand, United Kingdom, and United States report no levels (and therefore impact) of harvest. Of these, only Pakistan has indicated its sources of information – the provincial wildlife departments. United Kingdom refers to its response to 1.3.1, where it indicates that there are no permanent inhabitants in its territory.

In Australia, the levels and impact of harvest are unknown, or at least not quantified accurately, however research in this area is ongoing. Some available information indicates that hawksbill populations in northeast Australia may be declining partly due to turtle and egg harvests in certain areas. The take of green turtles in Western Australia is also reported. Details of a project underway to understand these issues are provided.

Mauritius has not provided a response regarding level of harvest or impact, but has noted that harvest is prohibited, with some exceptions.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Where it has not already been done, it would be helpful if more precise information were provided (e.g. detailed citations of published or unpublished reports/studies) to justify the assessments made.

1.5.3 Have any management programmes been established that include limits on levels of intentional harvest? If yes, please give details.

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, United Republic of Tanzania, and United States.

Of the 15 Signatory States that reported, seven (Bangladesh, Australia, Comoros, Madagascar, Philippines, Seychelles, Viet Nam) have indicated that they have established management programmes that include limits on levels of intentional harvest. Australia recently formed a taskforce to develop a nationally coordinated effort to manage harvest and provides details on ongoing efforts. Seychelles, in particular, has provided an extensive response, which documents in great detail the successive management measures put in place over the past 100 years. Philippines has also given an informative response.

Information on the other Signatory States' programmes is not sufficiently detailed. It is unclear in the case of Comoros and Bangladesh whether any intentional harvest is allowed. Madagascar's response is unclear, and needs a few more details and explanation. Viet Nam's response also needs further elaboration.

Eight Signatory States (Cambodia, Kenya, Oman, Mauritius, Pakistan, Sri Lanka, Thailand, United Kingdom) have not established management programmes that include limits on levels of intentional harvest; of these, the issue is indicated as "not applicable" in Cambodia, Kenya, Mauritius, Pakistan, and United Kingdom. Of these Signatory States, only Kenya and Sri Lanka have reported modest impact of harvest in Question 1.5.2. Level or impact of harvest is either low or does not exist in the other countries.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

With few exceptions, notably Seychelles, information on management measures related specifically intentional harvest is lacking – either on account of non-reporting or insufficient detail. This is important in view of Kenya and Sri Lanka having reported modest levels of traditional harvest in Question 1.5.2.

1.5.4 What are the cultural and traditional values, and economic uses of marine turtles in your country (consumptive and non-consumptive)?

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Kingdom, and United Republic of Tanzania.

Of the 16 Signatory States that reported, most (11 Signatory States = Australia, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Oman, Philippines, Seychelles, Sri Lanka, Viet Nam) had cultural/traditional consumption of turtle meat. Turtle meat was reportedly not consumed in Bangladesh, Mauritius, Pakistan, Thailand or United States.

Most of the Signatory States reporting (11 Signatory States = Australia, Bangladesh, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Oman, Philippines, Seychelles, Sri Lanka, Viet Nam) have turtle egg consumption. Cambodia, Mauritius, Pakistan, Thailand, and United States have no egg consumption.

Half the Signatory States (8 Signatory States = Australia, Bangladesh, Kenya, Madagascar, Philippines, Seychelles, Sri Lanka, Viet Nam) make use of turtle shell for economic purposes. Turtle shell is reportedly not used in Cambodia, Comoros, Islamic Republic of Iran, Oman, Mauritius, Pakistan, Thailand and United States.

Turtle fat is consumed in very few Signatory States (4 Signatory States = Australia, Kenya, Seychelles, Viet Nam). Bangladesh, Cambodia, Comoros, Islamic Republic of Iran, Oman, Madagascar, Mauritius, Pakistan, Philippines, Sri Lanka Thailand, and United States have no fat consumption.

In half the Signatory States reporting (8 Signatory States = Australia, Islamic Republic of Iran, Kenya, Oman, Philippines, Seychelles, Sri Lanka, Viet Nam) turtles are used for traditional medicine. Bangladesh, Cambodia, Comoros, Madagascar, Mauritius, Pakistan, Thailand, and United States do not use turtles for traditional medicine.

A majority of the Signatory States reporting (11 Signatory States = Bangladesh, Australia, Comoros, Kenya, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, United States, Viet Nam) have eco-tourism programmes centred on turtles. Cambodia, Islamic Republic of Iran, Madagascar, Mauritius, and Thailand have no such eco-tourism programmes.

In just under than half the Signatory States reporting (7 Signatory States = Australia, Comoros, Kenya, Oman, Philippines, Seychelles, Viet Nam) turtles are regarded as being culturally/traditionally significant. Viet Nam reported that fresh sea turtle blood is considered by some to be a stimulant for sportsmen and a treatment for cancer. Turtles are reportedly not culturally/traditionally significant in Bangladesh, Cambodia, Islamic Republic of Iran, Madagascar, Mauritius, Pakistan, Sri Lanka, Thailand, and United States. (However, Cambodia has indicated that buying and releasing a turtle is considered good luck.)

Mauritius and Thailand clarified that there is no harvesting and no traditional use, respectively; Australia added that turtles have been the focus of curriculum development in Aboriginal schools. Pakistan noted that eco-tourism is at an early stage.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

When revising the reporting template, it would be useful to allow Signatories the opportunity to elaborate on their responses with regard to consumptive and non-consumptive uses of turtles and to describe their relative prevalence and value; and to compare these responses to other published reports.

1.5.5 Describe any management agreements being negotiated, or already in place, with other concerned States in relation to sustainable levels of traditional harvest.

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, Thailand, United Republic of Tanzania, and United States.

Of the 15 Signatory States that reported, only a few (3 Signatory States = Australia, Comoros, Philippines) have one or two management agreements already in place, or being negotiated, with other concerned States in relation to sustainable levels of traditional harvest. Australia already has relevant agreements with Indonesia (1974) and Papua New Guinea (1985), and details of these agreements are provided. Philippines has a bilateral agreement with Malaysia covering the Turtle Islands; and it intends to deal with the issue of sustainable levels of traditional harvest in the framework of a memorandum of understanding signed with Indonesia and Malaysia in February 2004.

Comoros collaborates with the turtle research centre in Reunion, however it is unclear whether this concerns a management agreement related to traditional harvest. Bangladesh, Islamic Republic of Iran, Madagascar, Mauritius, Oman, Seychelles, Sri Lanka, and Viet Nam have no agreements being negotiated or in place with other concerned States in relation to sustainable levels of traditional harvest. The issue is considered “not applicable” or “not relevant” in Cambodia, Kenya, Pakistan, and United Kingdom.

1.6.1 Has your country undertaken a recent evaluation of the effectiveness of its nest and beach management programmes? If yes, provide a reference/contact for any published or unpublished reports.

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, most (12 Signatory States = Australia, Bangladesh, Comoros, Islamic Republic of Iran, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, United States, Viet Nam) have indicated that they have undertaken a recent evaluation of the effectiveness of their nest and beach management programmes. However, from the additional details provided it appears that some Signatory States may have misinterpreted the question. Many countries list references that confirm the existence of nest and beach management programmes, or mention that (scientific research) studies have been conducted at certain locations, without indicating whether they have included a critical evaluation of their effectiveness.

Only responses of Australia, Bangladesh, Philippines, United States, United Kingdom, and partially Seychelles suggest that a recent review of programme effectiveness was carried out, though few if any details are given. Australia has indicated that a Technical Working Group has been created to draft national protocols for monitoring marine turtle programs.

Cambodia, Kenya, and Madagascar, have not carried out any recent evaluation of effectiveness; Kenya added that it considers such a review “not applicable” and Madagascar clarified that its studies are too recent. Mauritius expressed uncertainty whether such a review had been carried out.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Although the wording of this question is quite clear, it appears to have been misinterpreted by many respondents, or perhaps the need for periodic assessments of the success or failure of ongoing management programmes has yet to take hold in many countries. Nevertheless, this important question merits inclusion in the reporting scheme and warrants follow-up by all Signatory States. Perhaps the question should request also the date when the evaluation took place, in order to further clarify the meaning.

1.6. 2. What measures are in place to minimise or reduce the mortality of eggs, hatchlings and nesting females (including that caused by feral and domestic animals)?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

All of the Signatory States (Australia, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Mauritius, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, United States) report on one or several measures in place to minimize or reduce the mortality of eggs, hatchlings and nesting females. Monitoring and protection, education and awareness programmes, and legislation, appear to be quite common, but other measures include: predator control, community involvement, egg relocation/hatchery programmes, beach clean-ups, light pollution reduction, beach guarding, etc. Australia, in particular, has undertaken a wide diversity of measures country-wide and lists its different activities; its Recovery Plan is available online. Philippines and Sri Lanka are among those that mention specific measures that are being implemented.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The level of detail varies among countries and in most of the responses is insufficient to describe what is actually being done on the ground. Nor is the outcome of such interventions stated (i.e. whether the geographic coverage is adequate; whether the measures are generally working effectively, based on certain success criteria etc.) It would be helpful also to indicate whether these management measures are widely applied, or rather are used only selectively at particular locations, because of resource constraints).

OBJECTIVE II: PROTECT, CONSERVE AND REHABILITATE MARINE TURTLE HABITATS

2.1.1 What incentives are there for assuring adequate protection of critical habitat outside of established protected areas?

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Republic of Tanzania, and United States.

At least 9 of the Signatory States (Australia, Comoros, Kenya, Madagascar, Philippines, Seychelles, Sri Lanka, Thailand, Viet Nam) appear to have some incentive or initiative to assure adequate protection of critical habitat outside of established protected areas, though not all of them are fully implemented. These initiatives range from legal frameworks (e.g., Australia, Philippines) to law enforcement, education, community participation, alternative livelihoods, awards, cash incentive schemes, eco-tourism, and other sea turtle monitoring activities. The issue is reported not to apply to United Kingdom or to areas in Oman that are very remote with little human access.

Cambodia, Islamic Republic of Iran, Pakistan, and Mauritius have no initiatives for protection of critical habitat outside of established protected areas. Pakistan indicates that such incentives will be included as part of a UNDP/GEF-funded wetland project. In Bangladesh, critical habitats have yet to be identified.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The level of detail in most of the responses is insufficient to assess what is actually being done in practice, and this is likely a reflection of overall difficulty in achieving adequate protection outside of established areas.

2.1.2 Are assessments routinely made of the environmental impact on marine turtles and their habitats of marine and coastal development and other human activities? If yes, give details.

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, 11 (Australia, Comoros, Islamic Republic of Iran, Kenya, Oman, Philippines, Seychelles, Sri Lanka, Thailand, United States, and Viet Nam) carry out assessments, to varying degrees, of the environmental impact of marine and coastal development and other human activities. Australia, Kenya, Seychelles, Sri Lanka, United States and Viet Nam all appear to carry out impact assessments specifically addressing marine turtles. EIAs are also conducted in other countries (e.g., Islamic Republic of Iran, Pakistan, Philippines, Thailand), but these are not necessarily directed at marine turtles and their habitats. In Madagascar, only observations made by sea turtle project teams are recorded. Cambodia and United Kingdom responded with “not applicable.” Bangladesh and Mauritius apparently do not carry out such environment impact assessments.

2.1.3 In general terms, what measures are in place to manage and regulate the use of beaches and dunes?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that responded, a majority (12 Signatory States = Australia, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Mauritius, Oman, Pakistan, Seychelles, Sri Lanka, United States, and Viet Nam) have regulations regarding location and design of buildings. Some countries further

commented on the existence of regulations to maintain a certain distance from the water (Mauritius, Seychelles); the extent of legal protection and conservation activities at certain locations (Sri Lanka); and the difficulties in enforcement (Kenya, Madagascar, Pakistan, Viet Nam).

Only five Signatory States (Australia, Comoros, Kenya, Mauritius, and United States) have regulations on the use of artificial lighting. Mauritius indicates that there are regulations for use of artificial light while fishing. In Seychelles, developers are encouraged to minimize the impact of artificial lights. Madagascar comments that on its many small islands where tourism is developing, special regulations on artificial lighting are needed.

Fewer Signatory States (Australia, Kenya, Seychelles, United States, Viet Nam) have regulations on the transit of vehicles in nesting areas. Australia further comments that the ability to close beaches to vehicle traffic is limited to certain conservation areas.

Several Signatory States (8 = Australia, Comoros, Kenya, Pakistan, Philippines, Thailand, United Kingdom, and Viet Nam) have other activities that are used to manage and regulate the use of beaches and dunes and have listed them. These activities mostly vary from country to country and include beach closure/controlled access (Australia); certain controls during nesting seasons (Comoros); repossession of major nesting areas lost to tourism (Kenya); prohibition of hunting and harassment of wildlife (Pakistan); guidelines for ecological destination development (Philippines); and briefing of military personnel, various local awareness activities, and “no entry” signs at certain places (United Kingdom). Thailand has indicated that only National Parks and protected areas are managed.

Bangladesh and Cambodia have no measures in place to manage and regulate the use of beaches and dunes.

2.1.4 Is water quality monitored, and are steps taken to protect water quality from land based and maritime pollution? If yes, please give details.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, Sri Lanka, and United Republic of Tanzania.

Most of the Signatory States reporting (11 = Australia, Islamic Republic of Iran, Kenya, Mauritius, Oman, Pakistan, Philippines, Seychelles, Thailand, United States, Viet Nam) responded positively to this question. Viet Nam, in particular, has listed a diversity of measures to protect water quality. While all these Signatory States have monitoring in place, it is less clear what steps are taken in some countries to protect water quality from land based and maritime pollution (e.g., Kenya, Oman, Thailand, United States). The policy is in place in Philippines, but lacks enforcement and monitoring.

Among the remaining Signatory States, Bangladesh and Cambodia do not monitor water quality and nor does Comoros, but the latter carries out education activities to prevent water pollution. Madagascar does not monitor water quality on a routine basis, nor does United Kingdom because water quality is not known to be adversely affected.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Given that the issue of water quality and pollution is likely handled by agencies other than those dealing with marine turtle conservation, it would be useful to solicit information from those agencies (and list them in the response), and to assess and comment on the extent to which sampling corresponds to important habitats for marine turtles (i.e. is any regular monitoring done that is relevant to marine turtle conservation efforts; and, if not, might it be useful, necessary and/or practical to adjust monitoring programmes, accordingly?)

2.1.5 What measures are being applied to ensure the effective prohibition of the use of poisonous chemicals and explosives?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

In almost all of the Signatory States some measure is being applied to ensure the effective prohibition of the use of poisonous chemicals and explosives. Most countries provide some information on the measures being implemented, with the exception of United States. The common measures include laws and legislation, followed by law enforcement and monitoring.

Islamic Republic of Iran reports that no measures are taken because poisonous chemicals and explosives are not used at all. Bangladesh has not taken any measures to ensure the effective prohibition of the use of poisonous chemicals and explosives.

2.2.1 Have any efforts been made to re-vegetate frontal dunes at nesting beaches?

Information has been provided by 70% (n=14) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, Sri Lanka, Thailand, and United Republic of Tanzania.

Of the 15 Signatory States that reported, more than half (8 Signatory States = Australia, Madagascar, Oman, Pakistan, Philippines, Seychelles, United States, Viet Nam) have made efforts to re-vegetate frontal dunes at nesting beaches. Seychelles, in particular, reports on extensive work in various locations. Projects have also been undertaken or are under way in selected locations in Australia and United States. Two countries indicate that efforts have had benefits to marine turtle conservation (Australia, Pakistan) and Philippines has also had success with its programme. Viet Nam's response addresses more issues than the one requested by the query.

Bangladesh, Cambodia, Comoros, Kenya, Mauritius, and United Kingdom do not have dune re-vegetation programmes. Some of the reasons provided include lack of resources (Comoros), irrelevance of the issue (Kenya), lack of dune damage (United Kingdom).

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It would be useful, as a few respondents have done, to describe the measures undertaken in more detail, and to comment on their efficacy and any lessons learned that might be of value to other Signatory States.

2.2.2 Are efforts being made to remove debris that impedes turtle nesting and hatchling production?

Information has been provided by 70% (n=14) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, Oman, United Republic of Tanzania, and United States.

Of the 14 Signatory States that reported, half (7 Signatory States = Australia, Comoros, Kenya, Madagascar, Pakistan, Philippines, Sri Lanka) are making an effort to regularly remove debris that could impede turtle nesting and hatchling production, at least on some beaches, and have described their activities in this regard. Australia, in particular, has extensive plans under way. The common theme appears to be beach clean-up programmes. Cambodia and Seychelles do beach clean-ups only occasionally (in the case of the latter, because impediments to turtle nesting are not serious).

Bangladesh, Mauritius, Thailand, United Kingdom, and Viet Nam have not implemented any special measures, although diving groups in Thailand conduct underwater garbage collection. Viet Nam lacks the operating funds to implement this activity, but states that it has some measures to control and prevent coastal erosion.

2.3.3 Are efforts being made to recover degraded coral reefs?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, most (14 Signatory States = Australia, Bangladesh, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Mauritius, Philippines, Oman, Seychelles, Sri Lanka, Thailand, United States, Viet Nam) are monitoring their coral reefs and/or making an effort at some level to recover degraded coral reefs. Most Signatory States describe their activities in this regard, at least superficially, with Seychelles providing very detailed information. Several countries have monitoring activities (e.g., Seychelles, Australia, Comoros, Kenya), whereas some have addressed or are addressing the problem by upgrading legal protection status (Cambodia), developing recovery plans (e.g., Islamic Republic of Iran), relocating sewage outfalls (Mauritius), reducing specific threats (Seychelles, United States), carrying out education and awareness activities (Thailand) and rehabilitation (Thailand).

Among the other countries, Pakistan has yet to explore its coral reefs, United Kingdom does not have degraded reefs, and Kenya is conducting some experiments. Madagascar has no recovery programme; Oman apparently is making efforts in this regard, but has not provided any information.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It would be useful, as a few respondents have done, to describe the measures undertaken in more detail, and to comment on their efficacy and any lessons learned that might be of value to other Signatory States.

2.2.4 Are efforts being made to recover degraded mangrove and sea grass habitats?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, most (14 Signatory States = Australia, Bangladesh, Cambodia, Islamic Republic of Iran, Kenya, Madagascar, Mauritius, Pakistan, Philippines, Oman, Sri Lanka, Thailand, United States, Viet Nam) are making some effort to recover degraded mangrove and sea grass habitats, but the primary effort by most countries is directed towards reforestation of mangroves.

Sea grass habitat recovery is apparently being undertaken by very few countries (Australia, Mauritius, United States) through: protection (Australia, United States) and regulation of dredging activities and coastal development (Mauritius). Australia has developed an impressive community-based sea grass monitoring programme called 'Seagrass-Watch.' Seychelles is planning a sea grass ecosystem study, but its mangroves are under relatively low pressure. Comoros has no recovery programme due to lack of resources; Sri Lanka has various mangrove recovery projects, but has no sea grass recovery programme. United Kingdom has no significant mangrove habitat. Cambodia's response requires further elucidation.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It would be useful to describe the measures undertaken in more detail, and to comment on their efficacy and any lessons learned that might be of value to other Signatory States.

OBJECTIVE III: IMPROVE UNDERSTANDING OF MARINE TURTLE ECOLOGY AND POPULATIONS THROUGH RESEARCH, MONITORING AND INFORMATION EXCHANGE

3.1.1 Have baseline studies been conducted or other information gathered on marine turtle populations and their habitats in your country? If yes, cite any available relevant literature.

Information has been provided by 90% (n=18) of the Signatory States. The Signatory States that have not reported are: Myanmar and United Republic of Tanzania.

All of the Signatory States have conducted baseline studies on marine turtle populations and their habitats, with the exception of Mauritius. Most countries have cited relevant literature, ranging from peer-reviewed journals to proceedings and workshops, but it is unclear (perhaps because the question does not ask explicitly) if these lists are comprehensive. For example, Australia's list of references would be much longer than the 23 references provided. Oman's list on the other hand appears to be quite comprehensive with 41 references. Islamic Republic of Iran indicates some of its studies have not been published and that all the available publications are listed. Some countries (e.g., Sri Lanka) have not as yet published much of their data, and it is unclear if Jordan has any published information. Comoros, Pakistan, and Sri Lanka have conducted baseline studies, and the information will be sent later to the IOSEA MoU Secretariat. United States refers to nesting beach protocols, but it is not clear from the response if baseline studies have been conducted. Viet Nam provides details on the baseline data collected, but it is unclear if any published papers or reports are available.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It would be useful if all Signatory States were to maintain lists of relevant literature that could be included in their national reports, as Oman, Seychelles and Australia (among others) have done, at least in part. It would be helpful if these publications and reports were sub-divided into categories such as nesting beach foraging, etc. All the details of the cited literature should be provided.

3.1.2 Are long-term monitoring programmes in place for priority marine turtle populations? If yes, give details.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Most Signatory States (12 Signatory States = Australia, Comoros, Kenya, Oman, Philippines, Pakistan, Seychelles, Sri Lanka, Thailand, United Kingdom, United States, Viet Nam) have monitoring programmes in place and varying levels of details are provided; only Bangladesh, Cambodia, Madagascar, and Mauritius do not. However, only six countries have indicated when the monitoring programme actually started (Australia - partly, Oman, Seychelles, Sri Lanka – incomplete, Viet Nam). Oman and Seychelles appear to have monitored some locations for almost three decades. It is unclear from the responses of Comoros, Kenya, Philippines, Thailand, and United States if their monitoring activities are “long-term” or for how long these monitoring activities have been carried out.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

This question appears to have been interpreted in two different ways: 1) monitoring that started many years ago or monitoring that is presently being planned as long-term, and 2) presence of any monitoring activity, regardless of duration. This question was meant to elicit information on the former (say, programmes of at least 10 years existence). It would be useful if all Signatory States were to indicate when specific monitoring programmes began and, as appropriate, for which species (as Australia has done); and whether there have been any breaks in data collection (as United Kingdom has indicated).

3.1.3 Has the genetic identity of marine turtle populations frequenting the waters of your country been characterized? If yes, give details.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

At least 3 Signatory States (Australia, Seychelles, and United Kingdom) have some information on their genetic stock structure and have provided supporting references, except for United Kingdom; more genetic studies are being planned by Australia and Seychelles. Some countries have collected genetic samples or are in the process of collecting samples or planning a study (e.g., Kenya, Madagascar, Sri Lanka, Thailand, United States). Although Philippines has indicated that the genetic identity of its populations have been characterized, it has only collected the genetic samples.

No work has been done on genetic identity of marine turtle populations in Bangladesh, Cambodia, Comoros, Mauritius, Oman, and Viet Nam. Pakistan's response to this question is ambiguous. Although Oman has indicated that no genetic work has been done, genetic analyses are known to have been carried out on samples from Oman.

3.1.4 What studies have been / are being used to identify migration routes?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, almost all (14 Signatory States = Australia, Cambodia, Comoros, Kenya, Madagascar, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, United States, Viet Nam) have been or are employing tagging to identify migration routes. Almost all Signatory States have provided some detail on their tagging work, however the information provided varies among countries and is generally very limited. Available information may include: number of years of tagging, number of turtles tagged, size class of turtles tagged, supporters, tag returns and recaptures, type of tag used, results of tagging studies, etc. Comoros, Oman, and United States provide no additional information on their tagging programmes.

Fewer Signatory States (8 Signatory States = Australia, Kenya, Madagascar, Philippines, Seychelles, Thailand, United Kingdom, United States) have carried out genetic studies to identify migration routes, and all have provided additional details, with the exception of United States. Again, the level of additional information provided varies among countries and is generally very limited. Reference is made to publications, genetic sample collection, location sampled, and future work. The analyses made of genetic sampling vary among countries, with some (e.g., Australia, Seychelles, United Kingdom) apparently being more advanced than others.

A similar number of Signatory States (8 Signatory States = Australia, Cambodia, Pakistan, Philippines, Seychelles, Thailand, United States, Viet Nam) have carried out satellite tracking studies, and all have provided some additional information about their work. The information provided varies among countries and may include details of: species and population tracked, years of tracking work, results obtained, publications, type of transmitter, and planned activities.

Bangladesh, Mauritius and Islamic Republic of Iran have not carried out any of the above work, although the latter was planning to commence tagging in 2004.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Tagging: Generally, the level of detail provided about past tagging activities is insufficient to assess the extent to which this collective action is serving its intended purpose. Whether tagging has actually helped to identify migration routes is not clearly indicated by most countries. The level of detail provided by

United Kingdom is an exception to this overall tendency, and is closer to what is expected. More detailed information would be useful from each country, and perhaps a rewording of the question would help to elicit information as to the results or outcomes of the studies undertaken.

Genetic studies: Generally, the level of detail provided about genetic studies is insufficient to assess the extent to which this collective action is serving its intended purpose. Whether genetic sampling has actually helped to elucidate migration routes is not clearly indicated by most countries. More detailed information would be useful from each country, and perhaps a rewording of the question would help to elicit information as to the results or outcomes of the studies undertaken.

Satellite tracking: Generally, the additional information provided by Signatories is insufficient to assess the efficacy of satellite tracking studies overall, or to help orient the direction of future work in this area. All countries conducting such research could provide more information on the results obtained to date, as well as future plans.

3.1.5 Have studies been carried out on marine turtle population dynamics and survival rates? If yes, give details.

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Myanmar, Philippines, United Republic of Tanzania, and United States.

Only Australia, Comoros, Jordan, and United Kingdom have carried out studies of marine turtle population dynamics and/or survival rates; the level of information varies greatly among these countries. Australia and United Kingdom provide the most information and some references. Studies have apparently been conducted by Comoros and Oman, but few or no details are provided. Seychelles has collected the basic data, but analyses are pending. At least half the Signatory States have not carried out these studies.

3.1.6 Has research been conducted on the frequency and pathology of diseases of marine turtles? If yes, give details.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Just over half of the Signatory States reporting (7 Signatory States = Australia, Comoros, Oman, Philippines, Seychelles, Thailand, United States, Viet Nam) have carried out some research on the frequency and pathology of diseases of marine turtles, but the intensity of the research and the data being collected as well as the frequency of data collection vary among countries. Australia appears to have conducted the most research in this regard, while Comoros looked at it once opportunistically. From some responses it is unclear what level or intensity of research has been done (e.g., United States, Thailand). Half the countries that reported have not carried out such research (Bangladesh, Cambodia, Kenya, Madagascar, Mauritius, Pakistan, Sri Lanka, United Kingdom).

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It would be helpful if countries that have conducted research into the frequency and pathology of diseases were to cite published and unpublished reports, and describe in more detail the nature of the work undertaken (e.g give time frames, indicate level of effort, highlight findings of interest, etc.)

3.1.7 Is the use of traditional ecological knowledge in research studies being promoted? If so, how?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Just under half of the Signatory States reporting (8 Signatory States = Australia, Islamic Republic of Iran, Madagascar, Oman, Philippines, Seychelles, Sri Lanka, United States) indicated that they are promoting the use of traditional ecological knowledge in research studies. Most of these countries provide some additional information on the nature of this work, though it tends to be limited. Only Australia has provided supporting publications. Interaction is commonly sought through interviews or questionnaires and/or by involving the local people in sea turtle projects. Sri Lanka has listed what the traditional knowledge has been used to identify.

Bangladesh, Cambodia, Comoros, Kenya, Mauritius, Pakistan, Thailand, and Viet Nam have yet to promote the use of traditional ecological knowledge in research studies. (Kenya indicated local community and stakeholder involvement in their projects elsewhere in its report, but did not indicate that the use of traditional ecological knowledge is promoted in research studies.) United Kingdom indicated that the question was not applicable in its context, because the only inhabited island is a military base.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It would be helpful if countries that have incorporated traditional knowledge in research studies were to cite published and unpublished reports, and describe in more detail the nature of these interactions.

3.2.1 Have priority research and monitoring needs been identified and included in regional and sub-regional action plans? If yes, which plans?

Information has been provided by 50% (n=11) of the Signatory States. The Signatory States that have not reported are: Bangladesh, Islamic Republic of Iran, Jordan, Mauritius, Myanmar, Oman, Sri Lanka, United Republic of Tanzania, and United States.

Of the Signatory States that responded, only Kenya, Philippines, Seychelles, Thailand, and Viet Nam indicate some sub-regional initiative that identifies priority research and monitoring needs. Those mentioned include: a Marine Turtle Conservation Strategy and Action Plan for the Western Indian Ocean; the SEASTAR2000 project and SEAFDEC activities in South-East Asia; and Philippines-Malaysia Turtle Islands Heritage Protected Area initiative. Kenya, Seychelles, and Viet Nam list some of the specific activities such as data collection, habitat protection, tagging, hatchery management, surveys, etc.

The remainder (Australia, Comoros, Madagascar, Sri Lanka, United Kingdom) mention priorities identified in either local and/or national plans. Pakistan has indicated that the issue will be addressed during the implementation of the Pakistan Wetlands Project, which is a national plan.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Signatories States that are involved in marine turtle conservation activities through sub-regional frameworks, projects or other bilateral/multilateral arrangements should mention them explicitly and describe them briefly.

3.2.2 On which of the following themes have collaborative studies and monitoring been conducted? (Give brief details for each)

Information has been provided by 70% (n=15) of the Signatory States. The Signatory States that have not reported are: Comoros, Islamic Republic of Iran, Myanmar, United Republic of Tanzania, and United States.

Of the 15 Signatory States that reported, only a few (Australia, Seychelles, Thailand, United Kingdom) have indicated collaborative genetic identity studies over large geographic areas. While Australia, Seychelles, and United Kingdom clearly describe the collaboration and provide relevant references, Thailand provides insufficient detail to explain the extent of the collaboration. Complete supporting references provided by Seychelles are useful.

Over half the Signatory States (9 Signatory States = Australia, Cambodia, Kenya, Madagascar, Oman, Pakistan, Philippines, Thailand, Viet Nam) have provided some information about collaborative studies on conservation status, but the level of detail varies enormously making it difficult at times to clearly interpret the information. Australia, Cambodia, Pakistan, and Viet Nam describe some national and/or international collaborative work (e.g. with other countries, among different levels of government, and with NGOs). Kenya, Oman, Madagascar, Philippines, and Thailand provide much more succinct information, and do not clearly indicate the nature of the collaboration.

The majority of the Signatory States (12 Signatory States = Australia, Cambodia, Kenya, Madagascar, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, Viet Nam) indicated collaborative studies regarding migration. Responses vary greatly and include information on the technique used, agencies involved, and species. However, the degree to which these studies can be described as collaborative varies, and in some cases the nature of the collaboration is not well-defined (e.g., Oman, Philippines, Pakistan, Sri Lanka, Thailand).

At least 8 Signatory States (Australia, Kenya, Jordan, Madagascar, Oman, Pakistan, Thailand, Viet Nam) indicated collaborative studies in the “other biological and ecological aspects” category. Some of these aspects are: fisheries bycatch mitigation, determination of sex ratios, captive breeding, disease, and behaviour, among a few others. However, often times it is not clearly indicated how the work is collaborative and/or among which groups the collaboration has been formed (e.g., Jordan, Kenya, Oman, Sri Lanka, Thailand).

Australia describes collaborative research and education work with Kuwait in the field of fisheries bycatch mitigation. Sri Lanka describes a local habitat assessment initiative and Viet Nam is considering fisheries bycatch reduction techniques.

Bangladesh and Mauritius have not conducted any collaborative studies on the above-mentioned themes.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The intent of this question was meant to elicit information about studies and monitoring conducted collaboratively with other entities, rather than domestic research conducted independently. Generally speaking, the countries that were in a position to answer this question interpreted it correctly. However, the question is very broad – covering national, regional, and even some global collaboration. Therefore, responses are generated at different levels and of different qualities.

If the question is retained in some form, it needs to be clarified and differentiated from Question 3.1.4, which also deals with studies on migration. Respondents should focus on work that depends on the formation of unique partnerships in order to achieve a particular objective, and should describe more explicitly the nature of the collaboration (e.g. who the other parties were, what work they did together). Supporting references, if available, would be useful.

3.3.1 List in order of priority the marine turtle populations in your country need of conservation actions, and indicate for each of them their population trends.

Information has been provided by 90% (n=18) of the Signatory States. The Signatory States that have not reported are: Myanmar and United Republic of Tanzania.

Among the 18 Signatory States that responded, the level of detail provided varies considerably. Only five (Australia, Madagascar, Philippines, Seychelles, and United Kingdom) have provided the information requested: species, population, and population trend when available. Australia, which provided the most comprehensive response, also provided references. Some of the remaining Signatory States (Jordan, Kenya, Islamic Republic of Iran, Sri Lanka, Thailand, Viet Nam) have provided some level of information, but omitted to comment on one or more of the following: species, location, and/or trends if available. Oman and Pakistan are in the process of collecting the information. Bangladesh and Mauritius report that a study is needed to identify turtle populations and/or their trends. The question appears to have been misinterpreted by Comoros, and possibly Cambodia and United States, which responded with “none” and “not applicable,” respectively.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

If answered comprehensively, this question has the potential to provide useful information to help orient the direction of future collective actions. The responses of a number of the Signatory States, which identify priority species/populations and trends, should be emulated as far as possible. Supporting references would be useful.

3.3.2 In what areas are research results being used to improve the efficacy of conservation actions?

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Republic of Tanzania, and United States.

Of the 16 Signatory States that responded, more than half (10 Signatory States = Australia, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Oman, Seychelles, Sri Lanka, United Kingdom, Viet Nam) are using research results to improve the efficacy of management actions, and most of the countries are applying them to threat mitigation measures (10 Signatory States = Australia, Cambodia, Islamic Republic of Iran, Kenya, Madagascar, Oman, Seychelles, Sri Lanka, United Kingdom, Viet Nam).

Half the Signatory States (8 Signatory States = Australia, Kenya, Madagascar, Pakistan, Philippines, Sri Lanka, Thailand, Viet Nam) are using research results to assess the efficacy of hatchery management practices, and 9 Signatory States (Australia, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Pakistan, Seychelles, Sri Lanka, Viet Nam) are using research results to assess the efficacy of measures to prevent habitat loss.

Only two Signatories (Australia, Kenya) have indicated other areas from which research results are being used to improve the efficacy of conservation actions. These areas include management of indigenous harvest and education and capacity building (some of these form part of the above general categories). Viet Nam commented that it lacks funding and knowledge to do genetic work.

Only four Signatory States (Australia, Kenya, Sri Lanka, and Viet Nam) are using research to improve the efficacy of actions in all categories. Bangladesh and Mauritius are not applying the results of research towards improvement of conservation practices.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It may be useful to redesign the question to allow Signatories to elaborate on how research is being applied specifically in each of these areas.

3.4.1 Has your country undertaken any initiatives to standardise methods and levels of data collection, including an agreed set of protocols? If yes, give details.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that responded, the majority of the Signatory States (10 Signatory States = Australia, Comoros, Kenya, Madagascar, Oman, Philippines, Seychelles, Thailand, United Kingdom, United States) have taken some initiative to standardize methods and levels of data collection. However, only a few Signatory States (e.g., Kenya, United Kingdom, United States, Viet Nam) clearly refer to having an “agreed protocol.” Comoros mentioned a MoU with Reunion. Protocols are being developed in some countries (e.g., Australia, Philippines). Five Signatory States (Bangladesh, Cambodia, Mauritius, Pakistan, Sri Lanka) reportedly have not undertaken initiatives to standardize methodology, but Sri Lanka will be addressing the issue. Viet Nam’s response is somewhat ambiguous.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It may be useful for Signatories that have adopted standardised methods, including data collection sheets, to provide details and copies to the Secretariat, with a view to making them available for examination through the IOSEA website. This could reinforce efforts to assure a degree of harmonisation of data collection across the region, or at least indicate a minimum level of data requirement.

3.4.2 What methods are being used for dissemination of information (to other Range States)?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Cambodia, Jordan, Myanmar, United Republic of Tanzania, and United States.

The most common means of data dissemination appear to take the form of publications (journals, websites, brochures, newsletters etc), followed by international meetings/workshops. Television, radio, personal communications and collaborations, exhibitions, displays, and presentation of practical research are some of the other methods listed. Australia and Viet Nam, in particular, use many diverse methods.

However, with few exceptions, it is not evident whether these means are targeted specifically towards other Range States, in order to convey information that might be valuable for conservation/management actions (e.g. on ongoing research, new findings, innovative techniques, unusual levels of turtle mortality, potential threats, etc.). The benefits/outcomes actually achieved through such interaction are not described, nor is an indication given as to what has worked and what has been less effective. Bangladesh, Mauritius, and Sri Lanka have no methods for disseminating information to other Range States. The question appears to have been misinterpreted by Oman.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The question should be clarified in order to focus the responses on the benefits realised through sharing of pertinent information, and the most appropriate methods in use.

3.4.3 To what extent does your country exchange scientific and technical information and expertise with other Range States?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that responded, very few (Comoros, United Kingdom, and United States) indicated that they exchange scientific and technical information and expertise with other Range States

“often (systematically)”. About eight Signatory States (Australia, Kenya, Madagascar, Mauritius, Oman, Pakistan, Philippines, Thailand) exchange scientific and technical information and expertise with other Range States “occasionally.” Seychelles, Sri Lanka, and Viet Nam characterise their exchange of scientific and technical information and expertise with other Range States as “rare.” Bangladesh, Cambodia and Islamic Republic of Iran “never” exchange scientific and technical information and expertise with other Range States.

3.4.4 To what extent does your country disseminate traditional knowledge on marine turtles?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that responded, only United States indicated that it disseminates traditional knowledge on marine turtles “often (systematically).” Four Signatories (Australia, Comoros, Oman, Philippines) disseminate traditional knowledge on marine turtles “occasionally”. Eight (Bangladesh, Islamic Republic of Iran, Kenya, Madagascar, Mauritius, Pakistan, Seychelles, Viet Nam) “rarely” disseminate traditional knowledge on marine turtles. A few (Cambodia, Sri Lanka, Thailand, and United Kingdom) indicated that they “never” disseminate traditional knowledge on marine turtles.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The placement of this question might be rearranged so that it is coupled with Question 3.1.7.

3.4.5 Does your country compile data on marine turtle populations of a regional interest? If yes, give details.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that responded, fewer than half (7 Signatory States = Australia, Kenya, Seychelles, Sri Lanka, Thailand, United Kingdom, Viet Nam) compile data on marine turtle populations of a regional interest. The level of detail provided varies from: a description of systems a country has in place in order to monitor regional data (e.g., Australia, Kenya: mapping system, national database), to what issues/areas might be of interest to other Range States (e.g. United Kingdom, United States), to a reference to a list of reports and publications (e.g. Seychelles) and a description of groups involved in the process (e.g. Viet Nam). Overall, migration information and/or tag returns appear to be common themes (e.g. Philippines indicated that it has compiled data of turtles tagged elsewhere that have been found in its waters; Thailand has compiled data on migration and shared feeding grounds).

Seven Signatory States (Bangladesh, Cambodia, Comoros, Mauritius, Oman, Pakistan, Sri Lanka) reported that they do not compile data on marine turtle populations of a regional interest. Madagascar expressed uncertainty.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The responses of several Signatories suggest recognition of the importance of, and interest in, compiling information pertinent to other Range States. However few details are provided, except for Australia and Kenya. More detailed descriptions of the work already undertaken by all Signatories in this regard might be valuable to other Range States.

OBJECTIVE IV: INCREASE PUBLIC AWARENESS OF THE THREATS TO MARINE TURTLES AND THEIR HABITATS, AND ENHANCE PUBLIC PARTICIPATION IN CONSERVATION ACTIVITIES

4.1.1 Describe, in general terms, the nature of the education materials that have been collected, developed and disseminated in your country.

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, most have to some extent collected, developed, and/or disseminated diverse educational materials. Australia, Kenya, Pakistan, Philippines, Sri Lanka, Thailand, Seychelles, Viet Nam appear to have been especially active in this area, with Australia having developed very extensive activities throughout the country. The extent to which each country has produced and disseminated educational materials is probably funding-dependent.

Islamic Republic of Iran and Mauritius report having no activities in this area. It is unclear from Madagascar's response if some of the material listed would classify as "educational material". United States' succinct response makes it difficult to judge the extent or diversity of educational material.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It is clear that production and dissemination of educational materials is widespread among most of the Signatories. A more complete and descriptive inventory (including titles, brief explanation of content, target audience, years of production, language versions) might give a better sense of whether new initiatives are needed (in terms of additional materials, expanded geographic coverage etc.) and whether any materials already produced might be used, or adapted for use, in another country. This is particularly true of more costly undertakings, such as well-produced videos, that might have potential uses in many countries.

A number of countries have interpreted this question about educational materials to refer also to mass media information programmes and other educational activities, which were meant to be covered in Question 4.1.3. These two questions should be combined or sufficiently clarified so that the distinction is more evident.

4.1.2 Have any community learning / information centres been established? If yes, give details.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that reported, most (10 Signatory States = Australia, Comoros, Kenya, Madagascar, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United States) have some community learning establishment. These are variously classified as: information centres, displays, interpretative centres, "turtle house" (Comoros), "environmental corner" and "Wildlife Club" (Seychelles). Details provided by Sri Lanka are unclear. The number of these centres varies among Signatories, probably due to numerous factors, with several countries having more than one centre (e.g., Australia, Philippines, Seychelles, Thailand). The response of United States needs further elaboration.

A few Signatory States (Bangladesh, Cambodia, Mauritius, Oman, Viet Nam) report having no community learning or information centres. The need for such centres is "not applicable" in United Kingdom context. Details provided by Viet Nam suggest that the question may have been misunderstood.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

While reporting on the existence of community learning and information centres, it would be useful for Signatories to indicate the extent to which these centres are frequented by the public, whether they are staffed full or part-time, or only seasonally; as well as the general impact they appear to be having (as measured, for example, by changes in peoples' behaviour in the vicinity of nesting beaches).

4.1.3 Have any mass media information programmes been developed and implemented? If yes, give details.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Republic of Tanzania, and United States.

Of the 16 Signatory States that reported, eight (Australia, Comoros, Islamic Republic of Iran, Oman, Philippines, Seychelles, Sri Lanka, Viet Nam) have developed and implemented mass media information programmes through television, radio, documentaries, and/or newspapers; Australia and Seychelles in particular seem to be very active, and Australia is developing more programmes. Mauritius has not provided any details.

Only a few Signatory States (Bangladesh, Cambodia, Madagascar, Pakistan, Thailand) have not developed any such mass media programmes, although Madagascar indicated that the information is not available. Kenya has plans to develop some programmes. The issue is “not applicable” to United Kingdom.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Some Signatories interpreted Question 4.1.3, which was meant to focus on awareness campaigns using mass media (television, radio, newspapers etc.), to refer also to conventional educational materials and activities. Given the similarity in some of the responses, the two questions might be combined or, alternatively, rewritten to make them more distinctive.

In any case, when reporting on the use of such avenues of communication, it would be useful for Signatories to provide further details of their content, production dates, regularity of screening, geographic reach, etc; and to comment generally on their efficacy. If described in sufficient detail, other Signatories might be inclined to seek more information on them with a view to possibly adapting techniques used successfully elsewhere. (On the other hand, some programmes that may have been successful when first introduced a number of years ago, might be in need of revitalisation.)

4.1.4 For which of the following groups have focused education and awareness programmes been developed and conducted?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that responded, about half (8 Signatory States = Australia, Cambodia, Comoros, Madagascar, Philippines, Seychelles, Sri Lanka, Viet Nam) have developed and conducted education and awareness programmes for policy makers.

With the exception of Bangladesh, Mauritius and United Kingdom, all Signatory States have developed and conducted education and awareness programmes for teachers, schools and/or fishing communities.

Fewer Signatory States (9 Signatory States = Australia, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Viet Nam) have developed and

conducted education and awareness programmes for the media. It is recommended that “media” be defined for clarity because of earlier problems in interpretation.

Only Australia, Comoros, Philippines, Sri Lanka, and Viet Nam have developed and conducted comprehensive education and awareness programmes for all of the above (i.e. policy makers, teachers, schools, fishing communities, and the media). United Kingdom has not developed and conducted education and awareness programmes for any one of these categories because the only residents on one of the islands are military and civilian personnel; all military personnel are educated on wildlife conservation when posted to the island. Mauritius has not developed and conducted any education and awareness programmes.

A few Signatory States (Australia, Bangladesh, Cambodia, Oman, Sri Lanka, United Kingdom) have developed and conducted education and awareness programmes for “other” groups, and these include indigenous communities (Australia); local communities (Bangladesh, Viet Nam); military, navy, police, local authorities, scientists, and stakeholders (Cambodia, Sri Lanka); tourists (Australia, Oman); and military and civilian personnel (United Kingdom).

Eight Signatory States (Australia, Islamic Republic of Iran, Madagascar, Pakistan, Philippines, Seychelles, Sri Lanka, United Kingdom) have provided further details of these targeted programmes, and some describe one or more of the activities. Seychelles provides quite a full account of various initiatives geared towards particular groups.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

This question was not meant to duplicate previous ones, but rather to elicit information about whether or not certain target groups were being reached through specialised interventions. Indeed, the various “other” groups that were mentioned by some respondents warrant inclusion in the main list. Without being repetitive, Signatories might provide additional information about when the timing of these interventions, report on any noteworthy successes, and indicate future plans in this regard.

4.2 Describe initiatives undertaken to identify and facilitate alternative livelihoods (including income generating activities) for local communities.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Republic of Tanzania, and United States.

Of the 16 Signatory States that reported, a majority (10 Signatory States = Australia, Bangladesh, Kenya, Madagascar, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Viet Nam) have undertaken initiatives to identify and facilitate alternative livelihoods (including income generating activities) for local communities. A variety of initiatives have been undertaken by the different countries: aquaculture and seaweed culture (Australia, Viet Nam); marine waste-based handicrafts and apiculture (Kenya); sustainable coastal development work (Oman); mangrove rehabilitation (Pakistan); soft loans (Philippines); artisan re-training (Seychelles); handicraft skill development, agriculture, fishing and marine ranching programmes (Viet Nam); and eco-tourism (Kenya, Madagascar, Sri Lanka, Viet Nam). Australia is undertaking a large study of socio-economic factors impacting levels of traditional harvest.

It is unclear from the initiative described by Comoros how it facilitates alternative livelihoods for local communities. Philippines’ response also needs some more explanation. There are no initiatives of this kind in Islamic Republic of Iran and Thailand. Such initiatives are reported to be “not applicable” in Cambodia, Mauritius, and United Kingdom.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Given the importance of this issue, it would be worthwhile for all Signatory States that have given brief, though very interesting, responses to this question to elaborate further (describing the programmes in more detail, and including time frames, cost etc.; mentioning challenges faced/overcome, as well as any insurmountable difficulties; overall effectiveness; potential for replication elsewhere etc.)

4.3.1 Describe initiatives undertaken to involve stakeholders, and local communities in particular, in the planning and implementation of conservation and management measures.

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, most (12 Signatory States = Australia, Bangladesh, Comoros, Islamic Republic of Iran, Kenya, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, Viet Nam) have undertaken some initiative to involve stakeholders and local communities in the planning and/or implementation of conservation and management measures. This is achieved through collaboration; participation in research and conservation programmes, as well as in planning processes; and through stakeholder meetings/dialogues. The responses given range from a short description of the initiatives (in most cases) to a simple categorisation of activities (e.g., Comoros). Australia, in particular, has extensive programmes involving stakeholders/local communities; Viet Nam also lists a number of different activities.

It is not clear from the responses given by several countries (e.g. Madagascar, Oman, United States) how stakeholders and local communities are involved in the planning and implementation of conservation and management measures. Cambodia and Madagascar have indicated that the issue does not apply to them.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Given the importance of this issue, it would be worthwhile for all Signatory States that have given brief responses to this question to elaborate further (describing the interventions in more detail; mentioning challenges faced/overcome, as well as any insurmountable difficulties; overall effectiveness; potential for replication elsewhere etc.)

4.3.2 Describe initiatives undertaken to encourage the participation of Government institutions, NGOs, private sector and the general community in research and conservation efforts.

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Cambodia, Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 15 Signatory States that reported, almost all (14 Signatory States = Australia, Bangladesh, Comoros, Kenya, Madagascar, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, United States, Viet Nam) report some participation in research and conservation efforts from Government institutions, NGOs, private sector and/or the general community – through funding of activities, involvement in workshops, and/or research and conservation activities. Most countries provide some description of the initiatives, with the exception of Madagascar.

A number of initiatives are noteworthy: (1) funding of various nongovernmental initiatives through a National Heritage Trust in Australia, where numerous diverse initiatives are under way; (2) the formation of a national sea turtle conservation group in Kenya, known as KESCOM, with membership from community groups, government institutions, NGOs, and private sector; and (3) encouragement of the private sector in Seychelles to take on conservation projects so that government personnel can be freed up to address policy issues, prosecution, etc. Additionally, Pakistan is trying to engage provincial wildlife

departments to collaborate with local and international NGOs. Oman indicated that it is planning information centres in key locations; whereas Mauritius has not undertaken any initiatives in this regard, deeming them “not required.”

4.3.3 What incentive schemes have been used to encourage public participation?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Kingdom, United Republic of Tanzania, and United States.

Of the 15 Signatory States that reported, most (10 Signatory States = Australia, Cambodia, Comoros, Kenya, Oman, Philippines, Seychelles, Sri Lanka, Thailand, Viet Nam) have used T-shirts for tag returns as an incentive scheme to encourage public participation. (Cambodia has discontinued this practice, while Seychelles is about to begin printing T-shirts for incentive purposes.)

Similar number of Signatory States (10 Signatory States = Australia, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Philippines, Seychelles, Thailand, Viet Nam) have used public acknowledgement as an incentive to encourage public participation. Only Seychelles has provided further details in this regard, mentioning its “Environment Awards Day”.

Fewer Signatory States (Kenya, Oman, Pakistan, Philippines, Thailand, Viet Nam) have used certificates as an incentive to encourage public participation. Kenya has provided further details of events organised by KESCOM.

Many Signatory States (9 Signatory States = Australia, Cambodia, Madagascar, Oman, Pakistan, Philippines, Sri Lanka, Thailand, Viet Nam) have used other incentive schemes to encourage public participation. These include caps and sunglasses (Australia), school notebooks (Cambodia), paid contracts for protection of nesting beaches (Madagascar), educational booklets for children (Oman), safe drinking water (Pakistan), caps and money (Philippines), guides for turtle projects (Sri Lanka), and hats and T-shirts for those who bring in injured or incidentally captured turtles (Thailand).

Philippines, Thailand, and Viet Nam have implemented all the above-mentioned incentive schemes and additional ones as well. Bangladesh and Mauritius have not implemented any incentive schemes.

A number of Signatory States (9 Signatory States = Australia, Cambodia, Kenya, Madagascar, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand) have provided further details, but they tend to be cursory. No further details have been provided by Bangladesh, Comoros, Islamic Republic of Iran, and Mauritius.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Without repeating statements made elsewhere, Signatory States should elaborate on any incentive schemes that have proven particularly effective over time; mention any difficulties that have been encountered/overcome; indicate approximate annual cost and funding sources, etc.

OBJECTIVE V: ENHANCE NATIONAL, REGIONAL AND INTERNATIONAL COOPERATION

5.1.1 Has your country actively encouraged other (non-Party) States to join CITES?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, Pakistan, and United Republic of Tanzania.

Of the 15 Signatory States that reported, just over half (8 Signatory States = Australia, Cambodia, Comoros, Kenya Oman, Philippines, United States, Viet Nam) have actively encouraged other (non-Party) States to join CITES. Six Signatory States (Bangladesh, Madagascar, Mauritius, Seychelles, Sri Lanka, United Kingdom) have not actively encouraged other (non-Party) States to join CITES. Thailand expressed uncertainty.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

This question appears in the national report template because it is one of the activities recommended under the Conservation and Management Plan. However, in view of the limited value of the information to be gained from any responses that might be given, it is suggested that the question be deleted from the template.

5.1.2 Has your country undertaken a national review of its compliance with CITES obligations in relation to marine turtles?

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Republic of Tanzania, and United States.

Of the 16 Signatory States that reported, almost all (13 Signatory States = Australia, Comoros, Islamic Republic of Iran, Kenya, Mauritius, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, Viet Nam) have undertaken a national review of compliance with CITES obligations in relation to marine turtles, with the exception of Bangladesh and Cambodia. Madagascar expressed uncertainty.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Signatory States may wish to cite (i.e. provide a reference to) existing published reports prepared for CITES purposes, in order to give a more ample explanation.

5.1.3 Does your country have, or participate/cooperate in, CITES training programmes for relevant authorities?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Kenya, Myanmar, and United Republic of Tanzania.

Of the 15 Signatory States that reported, most (12 Signatory States = Australia, Bangladesh, Cambodia, Comoros, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, United States, Viet Nam) have, or participate/cooperate in, CITES training programmes for relevant authorities, except for Mauritius and Oman. Madagascar expressed uncertainty.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Signatory States may wish to cite (i.e. provide a reference to) existing published reports prepared for CITES purposes, in order to give a more ample explanation.

5.1.4 Does your country have in place mechanisms to identify international illegal trade routes (for marine turtle products etc.) and to cooperate with other States to prevent/deter/eliminate illegal trade? If yes, give details. If no, describe any impediments in this regard.

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, almost all (13 Signatory States = Australia, Kenya, Comoros, Madagascar, Oman, Pakistan, Seychelles, Sri Lanka, Thailand, United Kingdom, United States, Viet Nam) indicated that they have some mechanisms in place, or that they are in contact with appropriate authorities to identify international illegal trade routes. Australia and Philippines describe their cooperation with other States. The authorities listed as collaborators include CITES Management Authorities/CITES Secretariat (Australia, Pakistan, Seychelles), Interpol (Seychelles, United Kingdom), domestic or foreign customs services (Australia, Madagascar, Sri Lanka, United Kingdom, Viet Nam), airport authorities (Seychelles, Oman), port authorities (Madagascar, Oman), wildlife agencies (Kenya), TRAFFIC International and other NGOs (Pakistan). United States has indicated that it is an active member of CITES. Thailand has not provided details.

Comoros indicated that it issues certificates for exportation of protected species, but does not describe any other mechanisms. Bangladesh has mechanisms in place only for its coastline. Cambodia and Mauritius reported no mechanisms or co-operation with other States, and do not provide any additional information. Islamic Republic of Iran has indicated that it has no international trade in sea turtle products.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Though asked to describe any impediments to identifying illegal trade routes and deterring illegal trade, no Signatory mentioned any particular difficulties in this regard. Nonetheless, as such illegal trade is known to occur, Signatories may wish to cite particular instances of successful interventions and prosecutions, as well as mention any difficulties experienced that impede more progress in this area. Signatory States may wish to cite (i.e. provide a reference to) existing published reports prepared for CITES purposes, in order to give a more ample explanation.

5.1.5 Which compliance and trade issues has your country exchanged information on or raised for discussion (e.g. through the MoU Secretariat, at meetings of Signatory States etc.)?

Information has been provided by 65% (n=13) of the Signatory States. The Signatory States that have not reported are: Comoros, Jordan, Myanmar, Thailand, United Kingdom, United Republic of Tanzania, and United States.

Of the 13 Signatory States that reported, a few (Australia, Cambodia, Philippines, Seychelles, Viet Nam) appear to have exchanged information or raised certain compliance and/or trade issues, however, the responses are not always clearly formulated. Only Australia and Seychelles cite specific issues (Australia had and continues to have bilateral discussions with other States on direct harvest of turtles in Australian waters; Seychelles raised the issue of hawksbill shell trade at a CITES meeting). Philippines mentioned policy formulation, law enforcement, and CITES permit issuance. Cambodia indicated CITES, but provided no further details. Viet Nam has held discussions at regional and international workshops and with TRAFFIC staff, but provided no further explanations.

Pakistan indicated that it has not exchanged information in this regard through the IOSEA Secretariat. Similarly, Bangladesh, Islamic Republic of Iran, Madagascar, Mauritius, Oman, and Sri Lanka have not exchanged information or raised any issues for discussion. Kenya's response needs further explanation.

5.1.6 Describe measures in place to prevent, deter, and eliminate *domestic* illegal trade in marine turtle products (e.g. monitoring, legislation, identification of enforcement gaps, training etc.)

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, almost all (15 Signatory States = Australia, Bangladesh, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Mauritius, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, United States, Viet Nam) have some measure in place to prevent, deter and eliminate domestic illegal trade in marine turtle products.

The level of detail provided varies among countries. Seychelles, for example, provides considerable detail (referring to legislation, public partnerships, interagency collaboration, training, education and awareness programmes), whereas many Signatories provide only cursory information. Illegal domestic trade issues are most commonly addressed through laws and legislation, monitoring, and education and awareness programmes, followed by training, research, capacity building, and partnerships among agencies.

Madagascar has no measures in place. The issue reportedly does not arise in Oman because there is no trade in turtle products.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Given that domestic trade in turtle products is known to be an issue in some Signatories, the level of detail in reporting on this point (or absence thereof) is likely not commensurate with the seriousness of the problem in some countries. The information provided by Seychelles may serve as useful guidance.

5.2.1 Has your country taken steps towards developing a set of key management measures to be used as a basis for more specific action plans? If yes, give details.

Information has been provided by 70% (n=14) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Kenya, Myanmar, United Republic of Tanzania, and United States.

Of the 14 Signatory States that reported, just over half (8 Signatory States = Australia, Comoros, Pakistan, Philippines, Seychelles, Sri Lanka, United Kingdom, Viet Nam) indicated that they have taken steps towards developing a set of key management measures to be used as a basis for more specific action plans. All of these countries have provided some level of detail, except for Comoros.

Australia appears to be among the most advanced in this regard, and it quotes the detailed objectives of its Recovery Plan for marine turtles. Viet Nam describes the formulation of its National Marine Turtle Action Plan and also outlines its priority themes. United Kingdom describes the long-term objectives of a broad Conservation Management Plan. Philippines indicates that action plans are made on a per site basis and are incorporated into agreements with stakeholders. Seychelles has dealt with this issue in the past through various projects. An ongoing marine ecosystem management plan is also addressing it, but no further details are provided. Pakistan was in the process of signing the IOSEA MoU and developing a National Action Plan. Sri Lanka refers to its National Marine Turtle Conservation Action Plan, but provides but no further details.

Bangladesh, Cambodia, Madagascar, Mauritius, and Oman have not taken steps towards developing a set of key management measures to be used as a basis for more specific action plans, but Madagascar indicated that it would do so shortly. Thailand indicated uncertainty about the issue.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Generally, there is limited information available on the extent to which the provisions of the Conservation and Management Plan have been transformed into broad objectives (key management measures) at the national level, and henceforth incorporated in more specific action plans. While this may well reflect the reality in some countries, this question might be reworded to clarify the intent, and be combined with the following question (5.2.2), which concerns the same matter.

5.2.2 What existing action plans are being considered as possible models?

Information has been provided by 65% (n=13) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, Seychelles, United Kingdom, United Republic of Tanzania, and United States.

Of the 13 Signatory States that reported, seven (Comoros, Kenya, Madagascar, Pakistan, Philippines, Sri Lanka, and Viet Nam) refer to some document – not necessarily existing action plans – that they will be considering as possible models. Comoros, Kenya, and Viet Nam are considering their existing action plans for turtles; Madagascar is considering the recommendations and conclusions from a national turtle project and WWF’s recommendations; Pakistan is considering the Biodiversity Action Plan for Pakistan as well as a Wetlands Project; and Philippines is considering a memorandum of agreement drawn up for one location, based on the IOSEA Conservation and Management Plan.

Bangladesh has not yet identified any existing action plans to consider as models. No action plans are so far being considered by Mauritius and Oman. The question has been answered as “not applicable” by Australia, Cambodia and Thailand. Viet Nam lists management plans that need to be implemented.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

To simplify reporting, this question might be combined with (integrated into) the previous one.

5.2.3 For which specific local management issues is international cooperation considered necessary? (List them)

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, Thailand, and United Republic of Tanzania.

All of the 15 Signatory States reporting (Australia, Bangladesh, Cambodia, Comoros, Kenya, Madagascar, Mauritius, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, United Kingdom, United States, Viet Nam) have listed one or more local management issues, in varying levels of detail, for which international cooperation is considered necessary.

Fisheries-related issues appear to be the most common item cited by respondents: illegal fishing in territorial waters/international trade (Australia, Cambodia, Philippines, Seychelles, United Kingdom, Viet Nam); incidental capture of turtles by foreign fleets (Pakistan, Seychelles); aspects of management and enforcement/patrolling of territorial waters (Mauritius, Philippines, United Kingdom); and gear technology (Kenya, Viet Nam). Similar issues considered to require a collective approach include: hunting and harvest of turtles by neighbouring countries on land and at sea (Australia, Kenya, Seychelles); oil spills, marine pollution, and marine debris (Australia, Pakistan).

A number of Signatories (Comoros and Viet Nam, in particular) identify basic research as a local management issue where international cooperation is necessary. This may include such matters as: identification of turtle populations and migration routes (Oman); tagging/satellite tracking (Kenya,

Madagascar; Viet Nam), study of marine turtle habitats (Bangladesh); and genetics (Kenya, Philippines, Viet Nam).

Other local management issues where international cooperation is considered necessary include: training/capacity-building (Bangladesh, Madagascar, Viet Nam); development of alternative livelihoods (Madagascar, Philippines); poaching and trade (Kenya) and long-term funding (Comoros). The response provided by United States needs further clarification. Sri Lanka's response is incomplete.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Though many of the responses that have been provided are brief, they represent a useful collection of ideas that could serve as a starting point for a more thorough discussion about priorities for international collaboration. Signatories should reflect more on this question and develop more detailed responses that indicate their specific needs and priorities in this area.

5.2.4 Are the national, sub-regional and regional action plans in which your country is involved subject to regular review?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Comoros, Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 15 Signatory States that reported, only Australia, Kenya, Philippines, and Sri Lanka appear to have regular reviews of their national plans for turtle conservation. Australia provides specific details of the review that is mandated; Sri Lanka did a first review recently. Details of the process in Kenya and Philippines are less clear. Pakistan reviewed its National Conservation Strategy in the recent past, however its specificity with regard to marine turtles is unclear. It is unclear from Viet Nam's response if the activities listed have resulted in regular reviews of action plans.

United Kingdom finalized its national conservation plan only in early 2004. No reviews have been carried out in Bangladesh, Madagascar (which has no official national plan), Mauritius or Oman. Thailand was uncertain if regular reviews were carried out. The issue of reviewing relevant action plans on a regular basis was considered "not applicable" by Cambodia, Seychelles, and United States.

No Signatory State mentions the review of sub-regional or regional plans, even though such plans are known to exist (e.g. ASEAN Sea Turtle MoU).

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The limited response to this question is, in part, a reflection of the fact that many Signatories have yet to elaborate national action plans. Nonetheless the principle of incorporating a formal review process, as Australia has done, is very important. As such, the question merits further attention in due course. Countries participating in the sub-regional ASEAN memorandum of understanding on sea turtles are encouraged to provide information on the review process for that instrument.

5.3.1 Identify what you consider to be useful existing (or potentially useful) mechanisms for cooperation in relation to marine turtle conservation and management at the sub-regional level. What initiatives has your country taken to try to strengthen these mechanisms?

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, most (14 Signatory States = Australia, Bangladesh, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Oman, Pakistan, Philippines, Seychelles, Thailand, United

Kingdom, United States, Viet Nam) have some existing or potentially useful mechanism they consider to be useful for cooperation in relation to marine turtle conservation and management at the sub-regional level. Australia has several mechanisms in place for cooperation at the sub-regional level.

Without going into detail, Islamic Republic of Iran, Oman, Philippines, and Viet Nam referred to a number of formal agreements as being useful mechanisms for sub-regional cooperation, citing in particular: ROPME, ASEAN-SEAFDEC, CMS, FAO-CCRF, and specific memoranda of understanding. United States mentioned the International Sea Turtle Society and related symposia.

Although this question was seeking information on formal mechanisms (institutional frameworks) for sub-regional cooperation, many of the respondents cited informal methods, such as information sharing/exchange and communication at meetings/workshops/symposia, cooperation between regional universities and conservation organizations, newsletters, databases, and email/internet. Other mechanisms for cooperation that were mentioned include standardized protocols (Kenya), research, monitoring, and capacity building (Bangladesh, Sri Lanka), trial studies on use of circle hooks in long-lining (Viet Nam), and prohibition of harvest and trade (Thailand).

Only a few Signatory States indicate initiatives they have taken to strengthen these mechanisms or challenges faced in this regard (e.g., Australia, Pakistan, United Kingdom). Mauritius indicated that no mechanism exists in its sub-region and Cambodia considered the issue “not applicable.”

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

This question might be rephrased to make it clearer that Signatories are being requested to comment on existing institutional frameworks that are, or could be, useful for facilitating cooperation in marine turtle conservation on a sub-regional level. As mentioned elsewhere, such frameworks do exist in some sub-regions (e.g. ASEAN-SEAFDEC in South-East Asia) and progress has been made towards establishing an IOSEA Marine Turtle Task Force in the Western Indian Ocean, in partnership with the Nairobi Convention.

It would be helpful if Signatories were to indicate the potential interest and particular strengths that the organisations they mention might bring to marine turtle conservation, as well as their capacity to take on a broader coordination role at the sub-regional level.

5.3.2 Does your country have or contribute to any websites or newsletters to facilitate networking and information exchange? If yes, give details.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that reported, several (9 Signatory States = Australia, Kenya, Pakistan, Philippines, Seychelles, Sri Lanka, United Kingdom, United States, Viet Nam) indicated that they have their own, or contribute to other, web-sites or newsletters to facilitate networking and information exchange. Almost all of these have or contribute to some website (Australia, Kenya, Pakistan, Philippines, Seychelles, Sri Lanka, United Kingdom, United States), but fewer use newsletters for dissemination of information (e.g., Kenya, Pakistan, Seychelles, Sri Lanka, United Kingdom, Viet Nam). In several cases, the extent to which marine turtles are covered in these websites or newsletters is not clear.

Thailand and Philippines have indicated that their websites were under construction or being improved, respectively. Bangladesh, Cambodia, Comoros, Mauritius, and Oman do not have or contribute to other websites or newsletters. Madagascar expressed uncertainty and is seeking information to answer this question.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Signatory States with websites or newsletters that have content related to marine turtle conservation should provide the relevant web address (URL) and publication information (e.g. frequency of publication, where it can be obtained etc.).

5.3.3 What material can your country contribute to the development of a web-based information resource for marine turtle conservation? (now available at www.ioseaturtles.org)

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, most (11 Signatory States = Australia, Cambodia, Islamic Republic of Iran, Kenya, Oman, Philippines, Seychelles, Sri Lanka, Thailand, United States, Viet Nam) can contribute data on marine turtle populations.

Almost all the Signatory States (15 Signatory States = Australia, Bangladesh, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United States, Viet Nam) can contribute nesting data.

Fewer Signatory States (11 Signatory States = Australia, Kenya, Madagascar, Oman, Pakistan, Philippines, Seychelles, Thailand, United Kingdom, United States, Viet Nam) can contribute migration data.

Fourteen Signatory States (Australia, Bangladesh, Cambodia, Islamic Republic of Iran, Kenya, Madagascar, Oman, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, United States, Viet Nam) can contribute information on projects.

Australia, Kenya, Oman, Philippines, Seychelles, Thailand, United States, and Viet Nam can contribute to all the above categories. Mauritius cannot contribute to any one of these above categories.

Some Signatory States (Australia, Kenya, Madagascar, United Kingdom) can contribute “other” information such as electronic copies of a volunteer training manual, marine debris information, sea grass monitoring (Australia), socio-economic information (Kenya), traditional knowledge (Madagascar), and genetic data (United Kingdom). Responses by Mauritius, Seychelles, Sri Lanka, and Viet Nam are unclear.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Comment: Notwithstanding the relatively positive response to this question by a majority of Signatory States reporting, relatively few have volunteered such information so far for inclusion in the IOSEA Website, which can accommodate a wide range of content. The Secretariat should pursue potential opportunities with the individual Signatories.

5.3.4 Has your country contributed names to the directory of experts and organisations concerned with marine turtle conservation?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, United Republic of Tanzania, and United States.

Of the 15 Signatory States that reported, only seven (Australia, Kenya, Madagascar, Philippines, Seychelles, Sri Lanka, and Viet Nam) are reported to have contributed names to the directory of experts and organisations concerned with marine turtle conservation. Madagascar added a note that it was done at

the meeting of Signatory States in January 2003. Sri Lanka lists one expert and Viet Nam has listed several experts and organisations.

Seven Signatory States (Bangladesh, Cambodia, Comoros, Mauritius, Oman, Pakistan, and United Kingdom) have not contributed names to the directory of experts and organisations concerned with marine turtle conservation. Thailand expresses uncertainty.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

This question needs rephrasing and clarification to explain that it refers to a list of “Useful contacts”, which was created after the CMP was drafted, for inclusion in the IOSEA Website. That list is presently not up-to-date and consideration is being given to structuring the information in a more accessible online database.

5.3.5 Has your country developed, or is it participating in, any networks for cooperative management of shared populations? If yes, give details.

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, United Republic of Tanzania, and United States.

Of the 15 Signatory States that reported, very few (5 Signatory States = Australia, Kenya, Madagascar, Philippines, Viet Nam) have developed or are participating in any networks for cooperative management of shared populations. Several networks have been developed by Australia: Australia has a formal, non-binding forum for collaboration with Indonesia and Timor-Leste; Australia and Papua New Guinea have signed the Torres Strait Treaty; Australia and Indonesia have a memorandum of understanding for traditional Indonesian fishermen entering Australian waters; and Australia also has developed networks within the South Pacific Environment Programme (SPREP). All networks are described except the one within SPREP. WWF-Australia has also been strengthening links with its counterpart in Indonesia.

Viet Nam is reportedly participating in networks for cooperative management and is coordinating and collaborating with many groups as well as participating in several symposia, but no details are provided. Kenya works with other countries in the Western Indian Ocean and recently organised a regional marine turtle workshop, however, no details are given. Similarly, Philippines works through the relevant ASEAN body, but no specifics are provided. Madagascar and Philippines exchange tagging information with other countries.

The remaining Signatory States (10 Signatory States = Bangladesh, Cambodia, Comoros, Mauritius, Oman, Pakistan, Seychelles, Sri Lanka, Thailand, and United Kingdom) have not developed and are not participating in any networks for cooperative management of shared populations, although this is reported to be under consideration in Thailand.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Where such international networks for cooperative management exist, further details should be provided. Alternatively, it may be more efficient to combine this question with the following Question 5.3.6.

5.3.6 Has your country cooperated in the establishment of any transboundary marine protected areas? If yes, give details.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that reported, only two (Australia, and Philippines) indicated that they have cooperated in the establishment of a transboundary marine protected area. Australia describes a transboundary marine protected area with Papua New Guinea through the 1985 Torres Strait Treaty. Philippines concluded a Memorandum of Agreement with Malaysia to create the Turtle Islands Heritage Protected Area in 1996; and is a partner in a tri-partite conservation plan for the Sulu-Sulawesi Marine Ecoregion. Oman indicated that it has cooperated in the establishment of transboundary marine protected areas, but the details provided are unclear. Viet Nam is considering the establishment of transboundary marine parks with six countries in the southeastern region. Thailand expressed uncertainty, but indicated that creating transboundary protected areas under the Convention on Biological Diversity is under consideration.

Most Signatory States (11 Signatory States = Bangladesh, Cambodia, Comoros, Kenya, Madagascar, Mauritius, Pakistan, Seychelles, Sri Lanka, United Kingdom, and United States) have not cooperated in the establishment of any transboundary marine protected area.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Where such transboundary MPAs exist, further details should be provided. It may be appropriate to combine this question with Question 5.3.5.

5.3.7 What has your country done to encourage other MoU signatory States to join CMS?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Comoros, Jordan, Myanmar, Seychelles, and United Republic of Tanzania.

Five Signatory States (Australia, Kenya, Pakistan, Philippines, United Kingdom) indicated that they have taken steps to encourage other countries (not necessarily MoU Signatory States) to join CMS. Australia indicated that it has encouraged States in the South Pacific to join CMS during a marine mammal workshop. Kenya has exchanged information, but no further details are provided. Philippines indicated that it engages non-Signatories through its joint Protected Areas initiative and Sulu-Sulawesi Marine Ecoregion programme, but no other details are provided. United Kingdom Ministers are briefed to encourage other countries to join CMS, opportunistically. Pakistan indicated that it has proposed to encourage the Russian Federation and other Central Asian States to join CMS.

Bangladesh, Islamic Republic of Iran, Mauritius, Oman, Sri Lanka, and Thailand have not yet made any such undertakings, and Madagascar has no information. Viet Nam is considering the issue. Cambodia believes the issue “not applicable” and United States indicated that it is not a Party to CMS.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

This question appears in the national report template because it is one of the activities recommended under the Conservation and Management Plan. However, in view of the limited value of the information to be gained from any responses that might be given, it is suggested that the question be deleted from the template.

5.3.8 What has your country done to encourage other MoU signatory States to join global fisheries agreements?

Information has been provided by 55% (n=11) of the Signatory States. The Signatory States that have not reported are: Australia, Comoros, Jordan, Myanmar, Seychelles, Thailand, United Kingdom, United Republic of Tanzania, and United States.

Of the 11 Signatory States that responded, only two (Madagascar, Philippines) appear to have done something to encourage other MoU Signatory States to join global fisheries agreements, but both responses need further explanation. Viet Nam is considering the issue. Pakistan will collect the relevant information later from the concerned agency. Bangladesh, Islamic Republic of Iran, Kenya, Oman, and Sri Lanka have not done anything in this regard; and Mauritius is not aware of anything having been done. Cambodia considers the issue “not applicable”.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

To the extent that this issue may have a bearing on management of shared turtle populations, those responsible for preparing their national report may wish to contact the Government agencies dealing with fisheries-related matters, to ascertain whether they have offered any such encouragement to other IOSEA Signatories to join relevant fisheries agreements. However, even if such information were forthcoming it is likely to be of limited value for reporting purposes. Therefore, it is suggested that this question be deleted from the reporting template.

5.3.9 What steps has your country taken to secure data on incidental capture (from regional fisheries bodies) and to encourage them to adopt marine turtle conservation measures within EEZs and on the high seas?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Kingdom, United Republic of Tanzania, and United States.

Of the 15 Signatory States that responded, several (7 Signatory States = Australia, Comoros, Kenya, Madagascar, Seychelles, Sri Lanka, and Viet Nam) appear to have taken some steps to secure data on incidental capture and/or to encourage RFBs to adopt marine turtle conservation measures within EEZs and on the high seas. The steps taken and the level of detail provided differ with each country.

In Australia, the measures include: a formal national policy on fisheries bycatch, issuance of logbooks to fishers to record interactions with marine turtles, formulation of an Act requiring fishers to report incidental captures of marine turtles, and provision of waterproof flipcards for fishers to identify marine species. Elsewhere, measures include: a departmental order (Comoros); voluntary reporting and capacity building (Kenya); monitoring of fisheries with onboard observers (Madagascar); rewards for international tag returns (Seychelles); legislation (Sri Lanka); and in Viet Nam: creation of a committee for annual reviews of bycatch, direct take, development of new gear and techniques, collection of data from local fisheries department, and workshops for technical input from experts.

The response of Comoros requires further clarification. Philippines indicated that it does not have much data, but further elaboration of its response is needed. Bangladesh, Islamic Republic of Iran, Mauritius, and Thailand reportedly have not taken any steps to secure data on incidental capture or to encourage RFBs to adopt marine turtle conservation measures. Information is not yet available for Oman and Pakistan. Cambodia considers the issue to be “not applicable”, but provides no further explanation.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

NB: the words “*from regional fisheries bodies*”, which were inadvertently left out of this question in the reporting template, have been inserted here for clarity.

Given the relative importance of, and increasingly attention being given to, the problem of incidental capture of marine turtles, all Signatory States should intensify data collection and improve reporting in this area. Responses to this question may be clearer if the issues of data collection and influencing RFB policy were separated into two different questions.

5.4.1 What capacity-building needs does your country have in terms of human resources, knowledge and facilities?

Information has been provided by 70% (n=14) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, Oman, United Kingdom, United Republic of Tanzania, and United States.

Of the 14 Signatory States that responded, most (12 Signatory States = Australia, Bangladesh, Cambodia, Comoros, Kenya, Madagascar, Mauritius, Pakistan, Seychelles, Sri Lanka, Thailand, Viet Nam) indicated their capacity-building needs.

The most common need is for trained personnel (e.g., Bangladesh, Cambodia, Comoros, Madagascar, Mauritius, Pakistan, Seychelles, Sri Lanka, and Viet Nam). The kind of trained personnel required differs among countries, but includes individuals trained in biology, sea turtle ecology, veterinary medicine, necropsies, monitoring/surveys, gear technology, law enforcement, as well as “trainers” who can work with volunteers, students and researchers.

Additionally, a number of respondents identify a need for equipment and infrastructure, such as patrol boats (e.g., Kenya, Seychelles, Thailand); field and office equipment (e.g., Kenya, Thailand, Seychelles); DNA analysis facilities (Kenya), an environmental education facility (Cambodia), and a sea turtle sanctuary and aquarium (Viet Nam).

Australia comments on the need to address social, health, welfare, and employment issues in remote indigenous communities. Mauritius requires human resources, but provides no further details. Viet Nam has listed numerous requirements under research (as does Kenya), educational programmes, conservation awareness, working with fishermen, and developing an eco-volunteer programme. Philippines indicated that training of key personnel has already been undertaken. The response of Islamic Republic of Iran, as it relates to the question asked, requires further clarification.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It may be useful for Signatory States for whom this question is relevant to indicate what their existing capacity is, both in terms of human resources and equipment available for marine turtle conservation activities, and to give a clearer picture of the extent to which progress is impeded in specific areas for lack of such resources. (For example, a country might indicate a need for a certain piece of equipment or personnel that is currently lacking or in insufficient number, describe what the present situation is in terms present availability or lack thereof, and explain the implications of not having that equipment or personnel – i.e. the impediments created by its absence.) The reporting template should be revised to accommodate this additional information.

5.4.2 Describe any training provided in marine turtle conservation and management techniques (e.g. workshops held, training manuals produced etc.)

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that responded, most Signatory States (11 Signatory States = Australia, Comoros, Kenya, Madagascar, Oman, Philippines, Seychelles, Thailand, United Kingdom, United States, Viet Nam) have carried out some training programme. Training activities and the groups targeted vary greatly among countries.

Australia, Seychelles, and Viet Nam describe rather extensive activities undertaken in this area, including regular specialised training workshops, provision of funds to regional conservation groups for training workshops, development of a code of conduct for tourist operators, and production of training manuals etc. Other Signatories that report activities include: Comoros (workshop on turtle biology, school manual);

Kenya (training in biology, education/awareness, legislation, data collection and maintenance); Madagascar (workshop, community meetings, university training); Oman (basic training for rangers on nest monitoring); Philippines (training of key personnel in turtle identification, biology, law enforcement etc.); Thailand (training for government officers, teachers, school children and private sector); United Kingdom (informing military personnel); and United States (university course in biology and conservation, TED technology transfer).

Bangladesh, Cambodia and Mauritius report not having provided any training (though Cambodia is known from other sources to have conducted a training workshop in 2002). Pakistan has yet to collect the relevant information. Sri Lanka is still compiling the data and is developing a website (though it is unclear how this relates to training).

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It would be helpful if the activities undertaken were described in more detail (mentioning time frames, numbers trained, frequency of repetition, titles of publications produced etc.) in order to give a clearer picture of their efficacy and possible need for more intensive activity. This might also help to demonstrate where synergies could be created through joint (e.g. bilaterally or sub-regional) activities. At a minimum, more ample descriptions would serve to illustrate where programmes are already in place, thereby avoiding the need to initiate similar work elsewhere. Comments on future plans for training workshops and development of training materials would be particularly helpful.

5.4.3 How have training programmes, workshops etc. been coordinated nationally and regionally (in order to avoid duplication of effort and to achieve economies of scale)?

Information has been provided by 70% (n=14) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, United Kingdom, United Republic of Tanzania, and United States.

Of the 14 Signatory States that responded, most (9 Signatory States = Australia, Cambodia, Comoros, Kenya, Madagascar, Philippines, Seychelles, Sri Lanka, Thailand) indicate that training programmes/workshops have been or are going to be coordinated nationally. It is less clearly stated how such coordination is achieved regionally, although mechanisms are known to exist in some sub-regions. Viet Nam has coordinated training programmes/workshops with other countries, as has Philippines.

Many Signatory States (Australia, Cambodia, Comoros, Kenya, Philippines, Seychelles, and Thailand) achieve coordination, or will do so in future, through various governmental institutions, national committees, or large organisations. The details provided vary. Australia's National Turtle Recovery Group, formed by representatives from different fields, appears to be an effective way of coordinating activities. Some countries (e.g., Cambodia, Comoros, Seychelles, Thailand) simply list the relevant organisations concerned, without elaborating on the mechanisms used. Madagascar highlights two regional workshops that were held for this purpose; while Kenya mentions information exchange and networking in order to apprise others of the contents of workshops held elsewhere.

Bangladesh, Mauritius and Oman have not undertaken coordination activities yet, and Pakistan has yet to collect the relevant information from their concerned agency. Sri Lanka also has yet to provide the complete information.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

To simplify reporting, this question might be combined with (integrated into) the previous one. The fact that few Signatories indicate the establishment of national coordination committees – though this may be implied by some responses – suggests that this may be an area in need of additional attention.

5.4.4 In relation to capacity-building, describe any partnerships developed with universities, research institutions, training bodies and other relevant organisations

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Kingdom, United Republic of Tanzania, and United States.

Of the 15 Signatory States that reported, about two-thirds (11 Signatory States = Australia, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Madagascar, Oman, Philippines, Seychelles, Thailand, Viet Nam) have established one or several partnerships with universities, relevant organisations, and research institutions nationally and/or internationally.

The range of partnerships varies among countries. Australia, in particular, names an extensive and diverse array of partnerships involving government, community groups, researchers, indigenous communities, NGOs and universities, and very briefly explains some of these partnerships.

All countries have indicated some form of university partnership, in addition to institutional and organisational partnerships, except for Seychelles and Thailand. In Seychelles, local partnerships are being developed with NGOs and the private sector, while in Thailand the only partnership is with a marine research institute.

Sri Lanka reportedly needs to provide more complete information in this regard. Bangladesh and Mauritius have not established any partnerships, and Pakistan has yet to collect the relevant information from the concerned agency. The response of Comoros needs further clarification.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

In almost all cases, it would be helpful respondents were to describe these partnerships in more detail, particularly if they bring any innovative approaches to turtle conservation and management that might be of interest or relevance to other Signatory States, as models of best practice.

5.5.1 Has your country conducted a review of policies and laws to address any gaps or impediments in relation to marine turtle conservation? If not, indicate any impediments encountered in this regard and when this review is expected to be done.

Information has been provided by 85% (n=17) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, and United Republic of Tanzania.

Of the 17 Signatory States that reported, about two-thirds (11 Signatory States = Australia, Comoros, Kenya, Madagascar, Oman, Pakistan, Philippines, Seychelles, Thailand, United Kingdom, Viet Nam) have conducted or are conducting a review of policies and laws to address gaps or impediments in relation to marine turtle conservation. However, only a few elaborate on what this entails.

Kenya indicated that two Acts are currently under review. Madagascar has developed a proposal to address gaps in laws on marine turtle protection (results pending). Philippines is discussing a new law with stakeholders in one area. Thailand has made improvements to its legislation concerning turtles, and United Kingdom has consolidated existing laws and removed anomalies. Viet Nam recently formulated a Law of Fisheries, and the Ministry of Fisheries has established a Steering Committee to oversee marine turtle issues. In Pakistan, the review is in progress.

Bangladesh, Cambodia, Islamic Republic of Iran, Mauritius, and United States have not conducted such reviews. However, a review of Bangladesh's Wildlife Act is under consideration and Mauritius commented that its legislation may be considered sufficient.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

In almost all cases, it would be helpful if the nature of the review being, or having been, undertaken were described more thoroughly (e.g. to identify the legislation or regulation in question; give timeframes for the initiation and expected or actual completion of the review; and possibly indicate whether there is a specific reason that necessitated the review).

5.5.2 Have any problems been encountered in relation to cooperation in law enforcement to ensure compatible application of laws across and between jurisdictions? If yes, please give details.

Information has been provided by 65% (n=13) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, Sri Lanka, United Kingdom, United Republic of Tanzania, and United States.

Of the 13 Signatory States that reported, only six (Australia, Cambodia, Kenya, Oman, Philippines, Viet Nam) report having encountered problems in relation to cooperation in law enforcement to ensure compatible application of laws across and between jurisdictions. The difficulties experienced include: differences in who is authorized to implement a particular Act (Australia); differences in legal specifications of fishing mesh sizes (Kenya); general problems in enforcement of environmental laws (Kenya, Oman, Viet Nam); lack of awareness of a new law (Philippines); and inadequate knowledge about marine turtles and their habitats (Viet Nam). Although unrelated to the question, among the list of problems encountered, Viet Nam included lack of standardized methodologies as well as inadequate monitoring and regulation of hatcheries. Cambodia does not provide any additional information.

Bangladesh, Comoros, Mauritius and Pakistan reported not having problems in this area. Madagascar, Seychelles, and Thailand expressed uncertainty.

OBJECTIVE VI: PROMOTE IMPLEMENTATION OF THE MOU, INCLUDING THE CMP

6.1.1 What has your country done to encourage other States to sign the MoU?

Information has been provided by 65% (n=13) of the Signatory States. The Signatory States that have not reported are: Comoros, Jordan, Mauritius, Myanmar, Seychelles, United Kingdom, and United Republic of Tanzania.

Of the 13 Signatory States that reported, only three (Australia, Philippines, United States) have encouraged other States to sign the IOSEA MoU. These representations have included: presentations on the benefits of signing the MoU (Australia), consultation meetings (Philippines), and personal contact at government-to-government level (United States). Australia, additionally, has provided funds to enable non-Signatory States to attend IOSEA meetings as observers.

Bangladesh, Cambodia, Oman, Sri Lanka, and Thailand report that they have not done anything to encourage other States to sign the MoU; Madagascar expressed uncertainty. Islamic Republic of Iran has indicated that such representations could be made through ROPME. Pakistan and Viet Nam appear to have misunderstood the question, and Kenya's response is unclear.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

Given the interest that Signatory States have in encouraging their neighbours to join and participate actively in the implementation of the MoU, this question merits retention in the reporting template (although it could be combined with the following Question 6.1.2). Clarification might be given as to the types of initiatives that Governments might undertake in this regard.

6.1.2 List any sub-regional workshops held which provided an opportunity to raise awareness of the MoU.

Information has been provided by 60% (n=12) of the Signatory States. The Signatory States that have not reported are: Comoros, Islamic Republic of Iran, Jordan, Myanmar, Seychelles, United Kingdom, United Republic of Tanzania, and United States.

Of the 12 Signatory States that reported, only three (Australia, Kenya, Philippines) have sought to raise awareness of the MoU at sub-regional workshops. Most notably, Australia cites several intergovernmental gatherings and bilateral meetings at which it has raised the issue of signing the Memorandum of Understanding. Kenya raised awareness of the MoU at a recent Western Indian Ocean Workshop. Philippines has taken advantage of consultation meetings of the Sulu-Sulawesi Marine Ecosystem project for this purpose. Viet Nam has attended several workshops and meetings, but it is unclear if awareness of the MoU was raised on all occasions. Mauritius is not aware of sub-regional workshops where there was an opportunity to raise awareness of the MoU.

Bangladesh, Madagascar, Oman, Sri Lanka, and Thailand list no sub-regional workshops used to raise awareness of the MoU. Cambodia, and Pakistan considered the issue as "not applicable" or not relevant.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

This question could be combined with (integrated into) the previous Question 6.1.1.

6.1.3 Is your country favourable towards amending the MoU in the future with a view to making it a legally-binding instrument?

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Comoros, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that reported, six (Australia, Bangladesh, Islamic Republic of Iran, Kenya, Mauritius, United States) favour amending the MoU in the future with a view to making it a legally-binding instrument. Australia commented that it would favour the amendment if the initiative came from the member States. Bangladesh's decision would be subject to the final approval of the competent authority. Kenya clarified that it would be in favour as long as the instrument did not conflict with existing national legislation. United States did not provide any additional comments.

Six Signatory States (Cambodia, Oman, Pakistan, Seychelles, Thailand, United Kingdom) did not favour amending the MoU in the future with a view to making it a legally-binding instrument. United Kingdom clarified that it deemed such considerations premature, preferring that resources be directed towards practical conservation and securing participation of key Range States. Madagascar, Philippines, and Viet Nam expressed uncertainty. Viet Nam was still considering the issue. Sri Lanka has yet to update its information.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It may be necessary to adjust the wording of this question to better differentiate between present views on this matter as opposed to longer-term considerations.

6.2.1 What has your country done to secure reliable sources of funding to support the MoU secretariat and implementation of the MoU?

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Comoros, Jordan, Mauritius, Myanmar, and United Republic of Tanzania.

Of the 15 Signatory States that reported, only three (Australia, United Kingdom, United States) have secured sources of funding to support the MoU Secretariat and implementation of the MoU. Australia, United Kingdom, and United States have provided funds to the Secretariat for its operations, meetings, and website, and for project implementation. United States indicated that its Marine Turtle Conservation Act would in future provide a mechanism to support implementation of specific projects identified in the Conservation and Management Plan.

Other Signatory States (Cambodia, Islamic Republic of Iran, Madagascar, Oman, Sri Lanka, Thailand) reported that they had not done anything as yet. Kenya indicated that it has an institution in place to implement some aspects of the MoU. Bangladesh has yet to identify what has been done towards this issue. Viet Nam was still considering the issue, as it is a developing country. Pakistan and Seychelles responded with "not applicable."

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

This question may have been misinterpreted by some respondents, who have tended to focus exclusively on provision of funds for the core operations of the MoU. This overlooks the necessary mobilisation of resources for national implementation activities -- which surely has occurred already in many Signatory States and could be documented, by making reference to domestic funding specially earmarked for marine turtle conservation activities. The wording of the question should be adjusted to make this distinction more clear.

6.2.2 Has your country nominated candidates to serve on the Advisory Committee?

Information has been provided by 20% (n=4) of the Signatory States. The Signatory States that have not reported are: Bangladesh, Cambodia, Comoros, Jordan, Kenya, Madagascar, Mauritius, Myanmar, Oman, Pakistan, Seychelles, Thailand, United Kingdom, United Republic of Tanzania, United States, and Viet Nam.

Of the 4 Signatory States that reported, Australia, Philippines, and Sri Lanka have nominated candidates to serve on the Advisory Committee. Islamic Republic of Iran has not.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

This question could be misinterpreted to imply Signatories who have nationals serving on the Advisory Committee, whereas it is meant to identify those Signatories that have helped to create the institution of the Advisory Committee by recommending individuals (who may or may not happen to be nationals of that country) for membership. Indeed, it could also apply to Signatory States that have nominated individuals who were ultimately not accepted. If the question is retained in the reporting template, the wording should be adjusted accordingly. However, in view of the limited value of the information to be gained from any responses that might be given, it is suggested that the question be deleted from the template.

6.3.1 From your country's perspective, which conservation and management activities ought to be among the highest priorities for funding (list up to 10 activities from the CMP).

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Comoros, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that reported, almost all (13 Signatory States = Australia, Bangladesh, Cambodia, Islamic Republic of Iran, Kenya, Madagascar, Mauritius, Oman, Philippines, Seychelles, Thailand, United Kingdom, Viet Nam) have provided a list of between 5 to 10 priorities. In Signatory States such as Australia and Seychelles, where extensive marine turtle work has been undertaken, management issues are a priority; Seychelles also identified, among other things, strengthening of collaboration and partnerships.

Collection of biological data, education and awareness programmes, capacity building and socio-economic issues, as well as management issues are among the common priorities identified by other Signatories. Several countries have listed regional or other collaboration and cooperation.

A number of countries (e.g. Bangladesh, Cambodia, Kenya, Thailand) provide generic lists of priorities, with little, if any, spatial or temporal detail. Pakistan still has to collect the relevant information. Sri Lanka has yet to update its information. The issue is still under consideration by various United States agencies.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It would be helpful if all Signatories were to provide some explanation or further elaboration of the priorities they have listed. This would include, where appropriate, more precise information on location of the activity, other actors that may need to be involved, and approximate timeframes within which the programme of work should, ideally, be conducted. Also, the question should clarify whether the priorities listed concern actions to be taken domestically or whether they may also reflect priority work to be undertaken elsewhere, involving other States, for the overall benefit of marine turtle conservation in the IOSEA region.

This being an important question for orienting future work under the Memorandum of Understanding, a consistent format for reporting responses should be developed to elicit the information mentioned above, with all countries listing their priorities in descending order or providing some other form of ranking.

6.3.2 Has your country explored options for funding of marine turtle conservation activities with other Governments and donor organisations? If yes, give details of the approaches made (successful or unsuccessful)

Information has been provided by 75% (n=15) of the Signatory States. The Signatory States that have not reported are: Comoros, Jordan, Myanmar, United Republic of Tanzania, and Viet Nam.

Of the 15 Signatory States that reported, about half (7 Signatory States = Islamic Republic of Iran, Kenya, Madagascar, Philippines, Seychelles, Sri Lanka, Thailand) have explored options for funding of marine turtle conservation activities with, and/or have received funding from, other Governments and donor organisations. The Governments/organisations mentioned as sponsors by various Signatory States that responded to this question (indicated in parentheses) include: ROPME (Islamic Republic of Iran); UNDP, BP, and WIOMSA (Kenya); and WWF-Madagascar and unspecified UK donor (Madagascar); Conservation International, EPAFI, and WWF (Philippines); GEF-World Bank, British High Commission (Seychelles); and Kyoto University (Thailand). Sri Lanka has yet to provide details. No Signatory State reported on unsuccessful attempts to raise external funding.

The remaining 8 Signatory States that responded to this question, including both developed and developing nations (Bangladesh, Cambodia, Mauritius, Oman, Pakistan, United Kingdom and United States) indicated that they have not explored options for funding of marine turtle conservation activities with other Governments and donor organisations.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The wording of the question should be adjusted slightly to make it clear that it is referring to the solicitation of funds from other Governments or organisations, rather than provision of such resources. In some cases (e.g. developed countries that are themselves donors), the question might not be applicable and their response should reflect this.

It would be helpful if Signatories that were successful in securing external funding were to provide further details (e.g. approximate amounts, time frames), in order to provide a clearer picture of the effectiveness of these approaches. It would also be helpful to mention unsuccessful attempts (e.g. projects that were submitted to GEF or other major donors, but were rejected) so that lessons might be learned from these experiences.

6.3.3 Has any funding and other contributions been solicited from industries impacting marine turtles and their habitats? If yes, give details of the approaches made (successful or unsuccessful).

Information has been provided by 65% (n=13) of the Signatory States. The Signatory States that have not reported are: Comoros, Islamic Republic of Iran, Jordan, Myanmar, United Republic of Tanzania, United States, and Viet Nam.

Of the 13 Signatory States that reported, only four (Australia, Kenya, Philippines, Seychelles) have solicited/received funding or contributions from industries impacting marine turtles and their habitats.

They include: petroleum and gas industries (cited by Australia and Kenya), and hotels (cited by Seychelles). Though not necessarily constituting “industries impacting marine turtles”, private companies and private island owners are also listed by Seychelles. Philippines notes funding received from “local government resources” of one province, which needs further clarification.

Eight Signatory States (Bangladesh, Cambodia, Mauritius, Oman, Pakistan, Thailand, Sri Lanka, United Kingdom) have not solicited funding/contributions from industries impacting marine turtles and their habitats. Although Madagascar indicated that it has not solicited funding/contributions from industries impacting marine turtles and their habitats, it noted that shrimp fisheries contribute by tagging turtles. Pakistan indicated that the issue is “not applicable.”

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The wording of this question might be broadened slightly to cover other donors, apart from those directly impacting turtles/habitats, as well as contributions in-kind that have been received (e.g. of the kind mentioned in the response of Madagascar). Also, the question should cover contributions made voluntarily, without necessarily having been solicited.

6.3.4 Describe any initiatives made to explore the use of economic instruments for the conservation of marine turtles and their habitats.

Information has been provided by 60% (n=12) of the Signatory States. The Signatory States that have not reported are: Australia, Comoros, Jordan, Kenya, Myanmar, United Kingdom, United Republic of Tanzania, and United States.

Of the 12 Signatory States that reported, about half (5 Signatory States = Madagascar, Oman, Philippines, Seychelles, Viet Nam) have taken or will be taking initiatives to explore the use of economic instruments for the conservation of marine turtles and their habitats. Few details are provided, but eco-tourism is cited as common theme (Madagascar, Oman, Sri Lanka, Viet Nam) followed by soft loans (Philippines) and aquaculture (Viet Nam). Seychelles has a project in place with a socio-economic component that will be addressing the use of economic instruments.

Bangladesh, Cambodia, Islamic Republic of Iran, Mauritius, Sri Lanka, and Thailand have not taken any initiatives in this area. Pakistan noted that it would be addressing the issue through the Pakistan Wetlands Project.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

As this question may be subject to differing interpretation of the term “economic instruments”, clarification may be needed in the form of specific examples (e.g. revenue generation through tourism, provision of soft loans, taxation etc.) Also, as there are some parallels with Question 1.3.3, which deals with “economic incentives”, and Question 6.3.6, which refers to eco-tourism explicitly, consideration might be given to combining or differentiating these related questions.

6.3.5 Have the private sector, foundations and NGOs been approached to catalyse the creation of a small grants fund?

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that reported, half (8 Signatory States = Australia, Cambodia, Kenya, Madagascar, Pakistan, Philippines, Seychelles, Thailand) are reported to have approached the private sector, foundations and NGOs to catalyse the creation of a small grants fund. All have listed the funding sources, which differ among countries.

The Tony and Lisette Lewis Foundation has contributed funds to WWF-Australia for marine turtle conservation. Cambodia has received funds from Ford Motor Company. Seychelles describes an existing

Environment Trust Fund (derived from businesses and individuals in exchange for tax exemptions) that can be used to fund turtle conservation activities, an approach that merits further exploration. WWF, in turn, is the non-governmental organisation most often cited as providing funds, supporting work in three countries (Madagascar, Pakistan, and Philippines); other organisations approached include WCS (Madagascar), UNDP and Conservation International (Philippines). Thailand mentions a sea turtle conservation foundation set up by a prominent hotel chain and support from other hotels. United Kingdom expressed uncertainty, but mentions government support of Flora and Fauna International's "Flagship Species Fund", which has financed some turtle projects in the Indian Ocean. Kenya is currently engaged in fund raising from the private sector and NGOs.

Bangladesh, Comoros, Mauritius, Oman, Sri Lanka, United States, and Viet Nam have not approached private sector, foundations or NGOs.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It is not entirely clear from some of the responses whether a small grants fund has actually been established for recurrent financing of projects (as implied by the question), or whether the funding is more of ad hoc in nature. The question might be reworded slightly to place more emphasis on the former aspect, and respondents should keep this in mind.

6.3.6 Describe any managed eco-tourism or other projects that have generated funding for conservation and management activities.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, United Republic of Tanzania, and United States.

Of the 16 Signatory States that reported, just under half (7 Signatory States = Australia, Comoros, Kenya, Oman, Pakistan, Philippines, Seychelles) describe tourism-related initiatives that have generated funding for conservation and management activities.

Australia, Kenya, Oman, and Seychelles describe in somewhat more detail their site-oriented activities for tourists, which include: participation in research activities (Australia), adoption of nests and tagged turtles, public lectures (Kenya); guided turtle watching (Oman), and paid visits to two World Heritage sites (Seychelles). The response provided by Comoros needs further explanation (to clarify whether revenue is generated by renting out bungalows to tourists). Pakistan is promoting eco-tourism for conservation of coastal and marine ecosystems. Philippines' eco-tourism activity generates funds for the protected area, but not specifically marine turtles; some community-based eco-tourism programmes also contribute to conservation and management.

Bangladesh, Islamic Republic of Iran, Mauritius, Sri Lanka, Thailand, and United Kingdom have no managed eco-tourism or other projects that have generated funding for conservation and management activities. No information is available from Madagascar. Viet Nam indicated that it has no funding for conservation and management activities in 2005, but does not indicate if in the past eco-tourism or other projects have generated funding. Cambodia considers this matter "not applicable."

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It would be helpful if Signatories that have such projects were to provide further information (e.g. on costs, amount of revenue generated by these initiatives, numbers of people taking part, benefits to local communities etc.); and to comment more generally on their efficacy and cost-effectiveness, including any mitigating factors (such as increased disturbance, degradation of habitat etc.)

6.3.7 In what way has your country promoted synergies with other regional/global convention secretariats?

Information has been provided by 60% (n=12) of the Signatory States. The Signatory States that have not reported are: Jordan, Kenya, Madagascar, Myanmar, Seychelles, United Kingdom, United Republic of Tanzania, and United States.

Of the 12 Signatory States that reported, half (Australia, Bangladesh, Comoros, Oman, Pakistan, Philippines) indicate ways in which they have promoted synergies with other regional/global convention secretariats. These have included: informing other regional bodies (i.e. SPREP) about the IOSEA MoU and its associated Conservation and Management Plan (Australia); bilateral or multilateral co-operation (Comoros); through ROPME (Oman); participation in regional and global meetings (Pakistan); and through a sub-regional marine eco-region project (Philippines). Bangladesh is promoting synergies with other countries under CBD and CITES.

Islamic Republic of Iran, Mauritius, Sri Lanka, and Thailand have not yet promoted synergies with other regional/global convention secretariats. Cambodia has noted “not applicable.” Viet Nam is still considering the issue.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The wording of the question might need further clarification to elicit responses that pertain directly to potential synergies between the IOSEA MoU and other conventions. Alternatively, the question might be consolidated with a number of others that deal with the issue of stimulating greater involvement and synergy.

6.3.8 Has your country explored (and secured) international funding support or other incentives for effectively managing marine turtle populations?

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that reported, less than half (6 Signatory States = Comoros, Kenya, Pakistan, Philippines, Seychelles, Sri Lanka) have explored (and secured) international funding support or other incentives for effectively managing marine turtle populations. International funding has been sought by or from UNDP and GEF in Comoros, Kenya, and Seychelles. Philippines (together with Sabah Parks of Malaysia) won the Paul Getty Award in 1997. Sri Lanka has yet to provide details. Pakistan is in the process of seeking international support.

Seven Signatory States (Australia, Bangladesh, Cambodia, Mauritius, Oman, Thailand, and United Kingdom) indicate that they have not explored (and secured) international funding support or other incentives for effectively managing marine turtle populations. United States refers to internal funds. Madagascar and Viet Nam express uncertainty, but Viet Nam is still considering the issue.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

The wording of this question appears to have lost the original intent of the related provision in the Conservation and Management Plan, which was to seek international financial compensation for measures such as complete prohibition of direct harvest. In its present form, the question tends to elicit duplicative responses; therefore if it is to be retained at all, it should be reworded accordingly. Otherwise it is probably best consolidated with other similar questions related to funding.

6.4.1 Has your country conducted a review of the roles and responsibilities of government agencies related to the conservation and management of marine turtles and the habitats? If not, indicate any impediments encountered in this regard and when this review is expected to be done.

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Jordan, Myanmar, Oman, and United Republic of Tanzania.

Of the 16 Signatory States that reported, just under half (7 Signatory States = Australia, Bangladesh, Kenya, Pakistan, Philippines, Thailand, Viet Nam) indicate that they have conducted a review of the roles and responsibilities of government agencies related to the conservation and management of marine turtles and the habitats. However, not many details are provided. Kenya has conducted a review under its Integrative Coastal Area Management Initiative; responses by the other countries either do not indicate whether a review has been conducted or do not directly address the question. Philippines' response is ambiguous. Thailand provides no supporting information.

More than half the Signatory States (9 Signatory States = Cambodia, Comoros, Islamic Republic of Iran, Madagascar, Mauritius, Seychelles, Sri Lanka, United Kingdom, and United States) have not conducted or completed such a review. Madagascar reports that the government has changed many times, and that a review was expected to be done by May-June 2004. Sri Lanka lacks a collaborating and coordinating body to conduct the reviews. Seychelles has partly completed its review, which aims to clearly define the roles and responsibilities of government, private sector and NGOs. The response of Islamic Republic of Iran is unclear, but it suggests that there would be no impediment to undertaking a review.

United States indicates that no review is needed. Cambodia notes that it is "not applicable". Comoros, Mauritius, and United Kingdom provide no further explanation.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

It may be more appropriate for this important question to follow, rather than precede, Question 6.4.2, which concerns the designation of a lead agency. Signatory States who state that no internal review of interagency roles and responsibilities has been or will be undertaken should elaborate, if only to indicate that the necessary arrangements are already clear and not in need of further examination. Those which indicate that arrangements have been reviewed should also elaborate (e.g. to indicate when this was done, and what the general outcome was).

6.4.2 Has your country designated a lead agency responsible for coordinating national marine turtle conservation and management policy? If not, when is this information expected to be communicated to the MoU secretariat?

Information has been provided by 80% (n=16) of the Signatory States. The Signatory States that have not reported are: Islamic Republic of Iran, Jordan, Myanmar, and United Republic of Tanzania.

Of the 16 Signatory States that reported, 14 Signatory States (Australia, Bangladesh, Cambodia, Kenya, Mauritius, Oman, Pakistan, Philippines, Seychelles, Sri Lanka, Thailand, United Kingdom, United States, Viet Nam) were reported to have designated a lead agency responsible for coordinating national marine turtle conservation and management policy. All, except Seychelles, list the lead agency in their response. Viet Nam listed several leading agencies.

Madagascar and Comoros have not yet designated a lead agency. Madagascar clarified that the institute that has been coordinating national data on marine turtle had not been validated by other agencies, however this was expected by April 2004.

6.4.3 Describe any initiatives that have been undertaken to encourage cooperation within and among government and non-government sectors (e.g. development of national networks, formation of steering committees etc.)

Information has been provided by 65% (n=13) of the Signatory States. The Signatory States that have not reported are: Cambodia, Comoros, Islamic Republic of Iran, Jordan, Myanmar, United Kingdom, and United Republic of Tanzania.

Of the 13 Signatory States that reported, almost all (11 Signatory States = Australia, Bangladesh, Kenya, Madagascar, Oman, Pakistan, Philippines, Seychelles, Thailand, United States, Viet Nam) have undertaken initiatives to encourage cooperation within and among government and non-government sectors. The various groups, committees, partnerships and other arrangements (e.g. through MoUs or recovery plans) are named and described at least superficially. Australia's National Turtle Recovery Group appears to be a particularly recommendable initiative. Viet Nam lists numerous initiatives and provides details of each.

Mauritius has not undertaken any initiatives in this regard, and the issue is under consideration by Thailand.

GENERAL RECOMMENDATIONS FOR IMPROVEMENT IN REPORTING:

To the extent that this question elicits information not brought out elsewhere in the national report, as appears to be the case in some countries, it merits retention; otherwise, for sake of efficiency it might be integrated with another question.

Additional information / remarks:

Additional information was provided by 10% (n=2) of the Signatory States. Islamic Republic of Iran expressed hope that a project proposal that was drafted and offered to UNDP, but curtailed for unknown reasons, would be resumed so that the country could initiate a more serious sea turtle programme. Seychelles clarified, in relation to Question 1.4.1, that no gear modifications or TEDs had been developed or implemented in that country. It also noted that although trawling was not carried out in Seychelles, trawling does affect Seychelles turtles in the Mozambique Channel, and that gill/drift nets are problematic for turtles.

Six Signatory States offered comments/suggestions to improve the present reporting format:

Australia provided a detailed response and suggested that the national report was too long and detailed, and that it required too much effort to coordinate input from all the different groups working on marine turtles. A shorter, non-ambiguous, non-repetitive template, which required a more general reporting against the 24 programmes was recommended. Australia also proposed that: any criteria used to assess Signatory States should be transparent and based on objective criteria; Question 3.3.1 could include estimates of current population numbers; the table in Question 1.1 be reformatted (suggestions are provided); threat sheets (annexes) should include an "unknown" category; and reporting on each genetic structure rather than on individual sites be accommodated.

Islamic Republic of Iran suggested the possibility of giving space for insertion of additional information; Mauritius proposed to make the questions more precise to avoid ambiguity; Pakistan suggested a slightly briefer, user-friendly format; Kenya commented that some questions were similar; and Seychelles noted that some questions were repetitive or not conducive to Yes/No responses. Seychelles suggested also that there be a way of measuring progress over time.

PART II: HABITAT TYPE AND SPECIES

In Section 1.1 of the report template, Signatory States were asked to list by name and provide coordinate for the nesting beaches, feeding grounds and developmental habitats important for marine turtles in their country. Elsewhere in the Online Reporting Facility, templates are provided to allow Signatory States to enter detailed information on the species found at these locations and a range of threats that may impact them. One would expect, therefore, a direct correspondence between the sites listed in Section 1.1 and the more detailed information provided in this section for each of the individual sites.

The way the reporting template is currently structured, it is not possible to differentiate whether or not a particular species occurs at one of the listed nesting, feeding, and developmental habitats in each country. This limits to some extent the interpretation of the data. Consideration will be given to modifying the template in future to provide for greater specificity.

Information for this section has been provided by 80% (n=16) of the Signatory States. The countries that have not reported are: Pakistan, Sri Lanka, Tanzania, and United States. In general, the data are fairly preliminary and of varying quality, and the subjective nature of the threat rankings means that caution must be exercised in any interpretation that may be attempted.

Australia

Australia has provided information on 60 sites, which include 47 nesting areas, 31 feeding grounds, and 15 developmental habitats. Specific coordinates have not been provided. It is unclear if all the sites listed under Section 1.1 are covered. At 9 locations, all three of the habitat types (nesting, feeding and developmental) are found. All six species occur in Australia.

Intensity of some or all threats at the different sites is provided; at only five sites is no information on threat given. The intensity of 89% of the threats mentioned is rated as “none to little”. Several “other” sources of threats are listed for many of the sites. Further details on threats (source of threat etc.) and conservation measures have been provided for many of the individual sites.

At least one or more measures that have been undertaken to remove threats at most sites (i.e. 55 = 83%). Information is noticeably absent from individual sites in Queensland. The most common measure undertaken is the designation/management of protected areas, sanctuaries, exclusion zones etc., followed by “other” measures that have been identified.

Bangladesh

Bangladesh has provided information on 13 sites (no coordinates have been given); however, some of the sites identified in Section 1.1 are not presented here and vice versa. All sites have nesting beaches; one site (St. Martin Island – the southernmost island), additionally has feeding and developmental habitats. Three species are found in Bangladesh: olive ridleys, greens, and hawksbills, with olive ridleys being most common.

No species information has been provided for Cox’s Bazaar. Intensity of threats has been indicated for each threat category at all of the sites, except the following (where no information provided): vehicles at Dublar Char Island; artificial lighting at Katka Beach of Sundarban Mangrove Forest; vehicles and sand mining at Kutubdia Island; industrial effluent, inshore oil pollution, artificial lighting, and vehicles in Mandarbaria: Sunderban Mangrove Forest; and industrial effluent at South East and South West coast of Bay.

About 67% of the threats indicated were “moderate or strong.” One or more measures to remove threats have been indicated at 62% of the sites (i.e. 8 sites) with “other” identified measures being most common followed by designation/management of protected areas, sanctuaries, exclusion zones etc. Some of the threats on St. Martin’s Island have been described in more detail.

Cambodia

Cambodia has listed 30 sites (no coordinates given), but some information is lacking from each site. Type of habitat has been listed for 29 sites, there being 16 nesting beaches and 22 foraging areas; apparently there are no developmental habitats in Cambodia. All sites listed under Section 1.1 are represented here. No species or habitat type has been listed for a site called “coastal areas of Cambodia”. It is unclear how or whether this grouping (i.e. coastal areas of Cambodia) is different from all the other sites listed. Species have been indicated for only 12 sites (40%). All species occur in Cambodia, except for the leatherback and flatback.

No information is given about intensity of threats at any site, except the grouping called “coastal areas of Cambodia”, where intensity of threats has been noted for only some categories, with the most common intensity of threat being “little” for the few categories indicated. The only measure mentioned as being taken to reduce threats is designation/management of protected areas, sanctuaries, exclusion zones etc. in the “coastal areas of Cambodia.”

Comoros

Comoros has listed 10 sites (no coordinates given), and has provided information on type of habitat and species for all sites, except at Moheli; there are 9 nesting sites, 5 foraging sites, and 2 developmental habitats. Only two sites have all three habitats: nesting, foraging, and developmental. All species occur in Comoros except for the olive ridley and flatback.

Judging from the response to Section 1.1, there may be more sites that are not presented here, although it is unclear whether the areas mentioned encompass those described in Section 1.1. With the exception of Moheli, the intensity of threats and measures introduced to remove those threats has not been indicated for any site. At Moheli, intensity of threats has been indicated for all threat categories except exploitation of live animals at sea and boat strikes. The majority of the intensity of threats indicated range from “none to little” (67%). Designation/management of protected areas, sanctuaries, exclusion zones etc., and modification of fishing gear are the measures taken to reduce threats.

Islamic Republic of Iran

Islamic Republic of Iran has listed 15 sites (no coordinates given), and has provided information on type of habitat (nesting and/or foraging) at all sites except Ommolkaram Island; 13 sites have nesting areas and 8 have foraging areas, but there are no developmental habitats. Almost all the sites listed under Section 1.1 are covered here. Seven sites have both nesting and foraging areas. Species composition has been indicated at all sites; only olive ridleys, greens, and hawksbills occur in Iran.

At all sites information is lacking on intensity of threat for one or more threat categories. Of the intensity of threats indicated, 74% range from “none to little.” Measures to remove threat have been introduced at only 20% of the sites (3 sites); the only measure taken is designation/management of protected areas, sanctuaries, exclusion zones etc. At four sites tourism, industrial, and urban development are noted in the footnotes; gas and oil exploitation-related pollution is reported to threaten 2 sites.

Jordan

Jordan has listed the 3 sites (no coordinates given) mentioned also in Section 1.1, all of which represent foraging habitats of hawksbills. No information has been given on intensity of threats or measures introduced to reduce threats. Although not indicated, greens and leatherbacks are also known to occur in Jordan.

Kenya

Kenya has listed 5 groupings (no coordinates given) and each grouping consists of several areas. Only nesting beach information is provided, but not all sites listed in Section 1.1 are covered here. Feeding and developmental habitats mentioned in Section 1.1 are not presented here. Olive ridleys, greens, and hawksbills are the three species listed.

Intensity of threat for all categories at all sites has been given, with 60% of the threats indicated as “moderate to strong”. One or more measures to reduce threats are reported, with “other” identified measures being most common, followed by designation/management of protected areas, sanctuaries, exclusion zones etc. Some additional details are provided on management (MPAs, gear exclusion, closed fishing season, TEDs, community-based conservation groups, participation by hotels, etc.) as well as on presence of ports, tourism and development.

Madagascar

Madagascar has listed 13 sites (no coordinates given) within which there are 11 nesting sites, 6 foraging areas, and 3 developmental habitats; however, some of the sites identified in Section 1.1 are not presented here and vice versa. Loggerheads, olive ridleys, greens, and hawksbills are listed for Madagascar. No information has been given on intensity of threats or measures taken to reduce threats for any site.

Mauritius

Mauritius has provided details of the 3 sites mentioned in Section 1.1, within which there are 2 nesting areas, 2 foraging areas, and 3 developmental habitats. Only one site has all three habitat types. Greens and hawksbills are the only species found in Mauritius. One of the sites has been listed ambiguously as “around Mauritius.”

Intensity of threat for all categories at each site has been indicated, except for the following: boat strikes and natural threats/predation at all three sites; and coastal erosion and vehicles at the “around Mauritius” site. The intensity of all of the threats listed is reported to be “none to little”. All three sites are protected by the Fisheries and Marine Resources Act. Fishing is prohibited at all 3 sites.

Oman

Oman has listed only one site, which appears to include all turtle habitat in Oman. Type of habitat and species have not been indicated. Intensity of threats has been indicated for all threat categories except for artificial lighting, coastal erosion, and natural threats/predation and is mostly categorised as “little.” No measure has been introduced to reduce threats.

Philippines

Philippines has listed 20 sites (no coordinates given) and most of these sites are composed of two or more areas, but not all sites listed in Section 1.1 appear to have been included. Some areas have been listed under two or more different sites (e.g., Amanpulo, Cuyo, Antique, and Palawan among others); the need for repetition is unclear. Type of habitat and species has been listed for 80% of the sites (i.e. 16 sites), within which there are 16 nesting areas, 1 foraging site, and 2 developmental habitats. Nesting and developmental habitats are found at two sites, and nesting and foraging habitats are found together at just one site. Olive ridleys, greens, and hawksbills occur in the Philippines; leatherbacks are listed at only one site.

Intensity of threats, at least for some categories, has been indicated at all sites, with 59% of the threats indicated as “none to little”. Measures introduced to remove threats have been given for 30% of the sites, (i.e. 6 sites), with designation/management of protected areas, sanctuaries, exclusion zones etc. being most common. Additional details on marine turtle sanctuaries, conservation measures, coastal erosion, egg exploitation, presence of resorts, etc are provided for some of the sites.

Seychelles

Seychelles has 21 records of sites listed (no coordinates given), each of which is composed of several areas. However, the format is quite different from other countries because sites have been repeated in order to distinguish the species occurring at a particular site. Data have been provided individually for the green and hawksbill, but the loggerhead and leatherback have been grouped together. There is information on 7 discrete sites and all have nesting, foraging, and developmental habitats except of course “offshore banks,” which only has foraging and developmental habitats. As only a reference to a map was provided in Section 1.1, it is difficult to judge if all sites have been covered. Loggerheads, greens, hawksbills, and leatherbacks are reported to occur in Seychelles.

No habitat type or species information has been provided for one of the records that includes the “Outer islands, Amirantes group, Alphonse, St. Francois, Platte, Coetivy, etc.” Intensity of threats has been indicated for most categories at the 7 discrete sites, with “little to none” being quoted for most of these threat categories (71%). At least one measure to reduce threats has been indicated for all areas except one, which consists of offshore banks, shoals away from land, etc. Further details are provided on factors affecting marine turtle populations, on some conservation measures taken, and on the natural history of turtles in these waters.

Thailand

Thailand has 10 records of sites listed (no coordinates given) within which there are 8 nesting areas and 2 foraging areas; these two habitat types overlap at only one site. Information is provided on more sites than those listed in Section 1.1. (One site has been repeated twice to indicate the presence of a different species, so there are actually 9 sites identified.) Olive ridleys, greens, hawksbills, and leatherbacks occur in Thailand.

Intensity of threat has been provided for most categories for all sites except Talibong island. The most commonly quoted intensity of threat is “none to little” (95%). Measures to reduce threats are reported to have been taken at all sites except Talibong Island, with designation/management of protected areas, sanctuaries, exclusion zones etc and other identified measures being most common.

United Kingdom

United Kingdom has 18 records, but several sites have been repeated twice and indicate the same type of habitat and species. Overall 10 discrete sites have been identified within which there are 9 nesting, 5 foraging, and 1 developmental habitats. Coordinates have been provided for several areas. More sites appear to be covered here than are presented in Section 1.1. Greens and hawksbills are the recorded species.

The threat categories and measures taken to reduce threats do not completely match up, the reasons for which are unclear (e.g., Chagos Bank; Egmont Atoll Plantation to Mini Mini; Salomon Atoll; Simpson Pt. to Cannon Pt.; South of GEODDS). The same information for Turtle Cove has been given twice. At all sites, intensity of threats has not been indicated for most categories. Two to three measures to reduce threats have been taken at all the sites. Some details on data collected and on management measures are also provided.

Viet Nam

Viet Nam has listed 28 sites within which there are 22 nesting, 27 foraging, and 27 developmental habitats. These appear to cover all sites mentioned in Section 1.1. 22 sites have all three habitats. All species occur in Viet Nam, except for the flatback. Intensity of threats has been indicated for most if not all categories at all sites, with 62% being rated “little to none.”

Measures to reduce threats have been implemented at 17 sites (i.e. 61%) with designation/management of protected areas, sanctuaries, exclusion zones etc. being most common. Some details on current and potential threats are given.

PART III: THREATS

A number of data anomalies need to be mentioned from the outset in relation to the following preliminary analysis:

- (1) Not all countries identified intensity of threat for all categories and/or all sites, therefore one cannot draw too many conclusions about trends, including regional variations.
- (2) Duplicate sites for Seychelles, Thailand, and United Kingdom (explained in the above analysis) have been counted as one, because intensity of threats is the same. (Due to mismatches in reporting even for the same sites in United Kingdom, the one for which more information was provided was selected.)
- (3) So-called “N/A – not applicable” responses have not been included.

Information has been provided by 65% (n=13) of the Signatory States. The Signatory States that have not reported are: Jordan, Madagascar, Myanmar, Pakistan, Sri Lanka, United Republic of Tanzania, and United States. Southeast Asia “plus” (=Australia, Cambodia, Philippines, Thailand, Viet Nam) and the Western Indian Ocean (= Comoros, Kenya, Mauritius, Seychelles, United Kingdom) are the two sub-regions that are primarily represented. There is only one country representing the Northern Indian Ocean (=Bangladesh) and two representing the Northwest Indian Ocean (= Islamic Republic of Iran, Oman).

Again, the data are fairly preliminary and of varying quality, and the subjective nature of the threat rankings means that caution must be exercised in any interpretation that may be attempted.

1. Exploitation of nesting females

Exploitation of nesting females is reported to pose a “moderate to strong” threat at 39 sites in 8 countries, from all sub-regions. These 39 sites were represented primarily in Bangladesh (31%), Philippines (21%), Kenya (13%), Australia and Seychelles (10% each). The remaining countries that reported (Comoros, Islamic Republic of Iran, Viet Nam) contributed less than 10% each.

Exploitation of nesting females is reported to be “little or no” threat at 107 sites in 10 countries, which represent all sub-regions. Of the 10 countries that reported “little to no” threat, the 107 sites were primarily represented in Australia (42%), Viet Nam (23%), and Islamic Republic of Iran (11%); all other countries (Bangladesh, Cambodia, Mauritius, Oman, Philippines, Seychelles, Thailand) were represented by less than 10% each.

2. Exploitation of live animals at sea

Exploitation of live animals at sea is reported to pose a “moderate to strong” threat at 45 sites in 6 countries, representing all sub-regions except the Northwest Indian Ocean. The 45 sites were primarily in Bangladesh (27%), Viet Nam (24%), Australia (20%), and Philippines (11%); the remaining countries that reported (Kenya, Seychelles) represented less than 10% each.

Exploitation of live animals at sea is reported to be “little or no” threat at 109 sites in 12 countries, representing all sub-regions. The 109 sites were primarily from Australia (40%), Viet Nam (16%), and Islamic Republic of Iran (13%); the remaining countries (Bangladesh, Cambodia, Kenya, Mauritius, Oman, Philippines, Seychelles, Thailand, United Kingdom) all represented less than 10% each of the sites.

3. Egg collection

Egg collection is reported to pose a “moderate to strong” threat at 50 sites in 9 countries, representing all sub-regions. Sites of “moderate to strong” egg collection are found mostly in Bangladesh (26%), Philippines (20%), Australia (18%), Islamic Republic of Iran (14%); the other sites (Cambodia, Kenya, Seychelles, Thailand, Viet Nam) represent less than 10% each.

Egg collection is reported to be “little or no” threat at 96 sites in 10 countries representing mostly Australia (43%) and Viet Nam (25%). The remaining countries (Cambodia, Islamic Republic of Iran, Kenya, Mauritius, Oman, Philippines, Seychelles, Thailand) are each represented by less than 10% of the sites. All sub-regions are represented except the Northern Indian Ocean.

4. Incidental capture in fisheries

Incidental capture in fisheries is reported to pose a “moderate to strong” threat at 55 sites in 9 countries, representing all sub-regions. The countries that represent a large proportion of these sites are Viet Nam (36%) and Bangladesh (24%); all other countries are represented by less than 10% (Australia, Cambodia, Islamic Republic of Iran, Kenya, Philippines, Seychelles, Thailand).

Incidental capture in fisheries is reported to be “little or no” threat at 94 sites in 10 countries in all sub-regions, except the Northern Indian Ocean. The countries representing most of these sites are Australia (48%), followed by Islamic Republic of Iran (12%), and United Kingdom (10%); Comoros, Mauritius, Oman, Philippines, Seychelles, Thailand, Viet Nam are less than 10% each.

5. Boat strikes

Boat strikes are reported to be “moderate to strong” threat at 52 sites in 6 countries representing all sub-regions. The sites where boat strikes are considered “moderate to strong” are largely from Viet Nam (44%), Bangladesh (23%), Australia (15%), and Islamic Republic of Iran (10%); Kenya and Seychelles represent less than 10% each.

Boat strikes are reported to be “little or no” threat at 75 sites in 9 countries, and all sub-regions are represented. The sites represent primarily Australia (55%) and Islamic Republic of Iran (12%); Bangladesh, Kenya, Oman, Philippines, Seychelles, Thailand, Viet Nam represent less than 10% each.

6. Plastics (at sea)

Plastics at sea are reported to be a “moderate to strong” threat at 47 sites in 8 countries, with all sub-regions represented. The 47 sites are mainly from Philippines (30%), Bangladesh (26%), Australia (19%), and Viet Nam (13%); Islamic Republic of Iran, Kenya, Oman, and Thailand each represent less than 10% of the sites.

Plastics at sea are reported to be “little or no” threat at 99 sites in 11 countries, representing all sub-regions. The 99 sites are mostly from Australia (39%) and Viet Nam (22%); Bangladesh, Comoros, Islamic Republic of Iran, Kenya, Mauritius, Philippines, Seychelles, Thailand, United Kingdom are each represented by less than 10% of the sites.

7. Industrial effluent

Industrial effluent is reported to pose a “moderate to strong” threat at just 16 sites in 6 countries; all sub-regions are represented except the Northern Indian Ocean. The 16 sites are from Philippines (38%), Australia and Viet Nam (19% each), and Islamic Republic of Iran (13%); Kenya and Thailand each represent 6% of the sites.

Industrial effluent is reported to be “little or no” threat at 123 sites in 11 countries and all sub-regions have been represented. The 123 sites are from Australia (39%) and Viet Nam (19%) followed by Bangladesh, Comoros, Islamic Republic of Iran, Kenya, Mauritius Oman, Philippines, Seychelles, and Thailand each representing less than 10% of the sites.

8. Inshore oil pollution

Inshore oil pollution is reported to pose a “moderate to strong” threat at 24 sites in 7 countries, representing all sub-regions except the Northern Indian Ocean. Inshore pollution is “moderate to strong” primarily in Viet Nam (63%) and Philippines (17%) with Australia, Cambodia, Islamic Republic of Iran, Kenya, Thailand each representing 4% of the sites.

Inshore oil pollution is reported to be “little or no” threat at 115 sites in 11 countries, representing all sub-regions. The 115 sites represent Australia (42%), Viet Nam (11%), Bangladesh and Philippines (10% each); Comoros, Islamic Republic of Iran, Kenya, Mauritius, Oman, Seychelles, and Thailand each represent less than 10% of the sites.

9. Agricultural/urban development

Agricultural/urban development is reported to pose a “moderate to strong” threat at 33 sites in 7 countries, with all sub-regions represented. These sites are mostly found in Bangladesh (36%), Islamic Republic of Iran (15%), Australia and Philippines (12%) with Kenya, Seychelles, and Viet Nam each representing less than 10% of the sites.

Agricultural/urban development is reported to be “little or no” threat at 99 sites in 12 countries; all sub-regions are represented. These sites occur in Australia (46%), Philippines (13%), Viet Nam (10%) followed by Bangladesh, Cambodia, Comoros, Islamic Republic of Iran, Kenya, Mauritius, Seychelles, Thailand, and United Kingdom each represented by less than 10% of the sites.

10. Artificial lighting

Artificial lighting is reported to pose a “moderate to strong” threat at 46 sites in 7 countries, with all sub-regions represented. The 46 sites are from Philippines (28%), Bangladesh (22%), Australia (17%), Viet Nam (13%) and Islamic Republic of Iran, Kenya, and Seychelles each comprise less than 10% of the sites.

Artificial lighting is reported to be “little or no” threat at 101 sites in 11 countries in all sub-regions. The 101 sites occur in Australia (42%), Viet Nam (21%), and Islamic Republic of Iran (11%) with Bangladesh, Comoros, Kenya, Mauritius, Philippines, Seychelles, Thailand, and United Kingdom each composing less than 10% of the sites.

11. Coastal erosion

Coastal erosion is reported to pose a “moderate to strong” threat at 35 sites in 7 countries in all sub-regions except the Northern Indian Ocean. The 35 sites represent Viet Nam (46%), Seychelles (14%), Kenya and Philippines (11% each) with Australia, Comoros, and Islamic Republic of Iran each representing less than 10%.

Coastal erosion is reported to be “little or no” threat at 104 sites in 9 countries, representing all sub-regions. These 104 sites represent primarily Australia (45%), Bangladesh (13%), Viet Nam (12%), Philippines (11%) followed by Islamic Republic of Iran, Kenya, Mauritius, Seychelles and Thailand (<10% each).

12. Vehicles

Vehicles are reported to be a “moderate to strong” threat at just 19 sites in 6 countries from all sub-regions. These sites are largely from Viet Nam (47%), Bangladesh and Islamic Republic of Iran (16% each), Australia (11%) followed by Kenya and Seychelles (5% each).

Vehicles are reported to be “little or no” threat at 107 sites in 12 countries representing all sub-regions. The 107 sites are from Australia (40%), Viet Nam (17%), Philippines (10%) and Bangladesh, Comoros, Islamic Republic of Iran, Kenya, Mauritius, Oman, Seychelles, Thailand, and United Kingdom (<10% each).

13. Sand mining

Sand mining is reported to pose a “moderate to strong” threat at only 17 sites in 6 countries, representing all sub-regions except the North Western Indian Ocean. Most of these sites are in Viet Nam (71%) followed by Australia, Bangladesh, Comoros, Kenya, and Seychelles (6% each). Sand mining is reported to be “little or no” threat at 114 sites in 11 countries representing all sub-regions. The 114 sites are from Australia (41%), Viet Nam (14%), Bangladesh and Philippines (10% each), and Cambodia, Islamic Republic of Iran, Kenya, Mauritius, Oman, Seychelles, and Thailand (<10% each).

14. Natural threats/predation

Natural threats/predation are reported to pose a “moderate to strong” threat at 53 sites in 8 countries in all sub-regions. These sites are from Bangladesh (25%), Viet Nam (23%), Australia and Philippines (17% each), and Islamic Republic of Iran, Kenya, and Seychelles (<10% each). Natural threats/predation are reported to be “little or no” threat at 81 sites in 9 countries, representing all sub-regions except the Northern Indian Ocean. The 81 sites represent Australia (33%), Viet Nam (20%), Philippines (11%), Thailand (10%), and Comoros, Islamic Republic of Iran, Kenya, Seychelles, and United Kingdom representing less than 10% each.

15. Other

Other threats are reported to be “moderate to strong” at 25 sites in 4 countries, from all sub-regions. These sites represent Bangladesh (44%), Australia (28%), Islamic Republic of Iran (16%), and Kenya (12%). Tourism has been listed as the most common threat in the “moderate to strong” category, but others mentioned include predation, marine debris, disease, incidental capture, and flooding of nests.

These threats are reported to be “little to none” at 20 sites in 2 countries from Southeast Asia and the Western Indian Ocean with 80% of the sites being from Australia and 20% from United Kingdom. Threats mentioned in the “little to none” category, include: incidental capture in the Queensland Shark Control; defence activities; boat disturbance, marine debris, disease, some tourism, dredging of shipping channels; donkey trampling / cat and rat predation; and human interference and trampling of algae pastures.

Finally, analysing the data on directed take, defined as “exploitation of nesting females and live animals at sea, and egg collection”, it is reported that 28 sites in 7 countries (representing all sub-regions except the Northwest Indian Ocean) have direct take that is characterised as “moderate to strong.” These sites represent Bangladesh (43%), Philippines (21%), Kenya (14%), Viet Nam (11%), followed by Australia, Comoros, and Seychelles (4% each).

One might also be interested to examine the indirect impact of human activities, defined as “incidental capture, boat strikes, plastics, industrial effluent, inshore oil pollution, agricultural/urban development, artificial lighting, vehicles, and sand mining”. At 34 sites in 5 countries there is reportedly “little to no” threat from all forms of indirect impact, taken together. These sites are primarily found in Australia (74%), Thailand (12%), Seychelles (9%), and Islamic Republic of Iran and Viet Nam (3% each).

PART IV: MITIGATION MEASURES

At present, the reporting template gives limited scope for Signatory States to indicate measures that may be in place to mitigate threats at particular sites. The template could be amended in future to include a number of other mitigation measures mentioned in the national reports (see point 4, below).

Nevertheless, some information has been provided by 60% (n=12) of the Signatory States. The Signatory States that have not reported are: Jordan, Madagascar, Myanmar, Oman, Pakistan, Sri Lanka, United Republic of Tanzania, and United States. (Note: For this analysis, duplicate sites for Seychelles, Thailand, and United Kingdom (explained in the above analyses) have been counted as one.)

1. Designation/management of protected areas, sanctuaries, exclusion zones etc

Designation/management of protected areas, sanctuaries, exclusion zones etc. has been undertaken at 88 sites in 10 countries, representing all sub-regions. Most of these sites occur in Australia (40%), Viet Nam (19%), United Kingdom (11%) followed by Bangladesh, Cambodia, Comoros, Iran, Kenya, Philippines, Seychelles, and Thailand (<10% each).

2. Modification of fishing gear

Modification of fishing gear has been undertaken at 28 sites in 3 countries, in the regions of Southeast Asia, Northern Indian Ocean and Western Indian Ocean. The majority of these sites occur in Australia (89%), followed by Bangladesh and Comoros (<10% each).

3. Restrictions on vehicle traffic

Restrictions on vehicle traffic are in place at 48 sites in 6 countries in all sub-regions except the Northwest Indian Ocean. Most of these sites occur in Australia (48%), Viet Nam (21%), United Kingdom (19%), followed by Bangladesh, Kenya, and Seychelles (<10% each).

4. Other mitigation measures

Eight countries have indicated “other” measures taken to reduce threats at 62 sites. These other measures have mostly been implemented in Australia (45%), United Kingdom (16%), and Thailand (11%), followed by Bangladesh, Kenya, Mauritius, Philippines, and Seychelles (<10% each).

These other measures include: visitor requirements, nest protection, cultural restrictions on harvest, vehicle control on beaches, predator control, tourist management, artificial light control, public awareness (Australia); turtle and nest protection (Bangladesh); advocacy and legislation (Kenya, Mauritius, Philippines); zoning plans (Seychelles); collaboration with local community (Thailand); and prohibition of fishing activity (United Kingdom) among others.