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IOTC CAPACITY BUILDING ACTIVITIES IN SUPPORT OF DEVELOPING COASTAL IOTC CPCs: 2015 ACTIVITIES

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Purpose

To provide the IOTC Working Party on Data Collection and Statistics with an overview of the activities that, independently or along with other partners, the IOTC Secretariat initiated during the last year in support of developing coastal states, and the main results of those activities.

Background

Since its inception the Commission has allocated funds from its regular budget to assist developing coastal CPCs in the Indian Ocean in the implementation of the IOTC data requirements. In addition to the funds allocated by the Commission, the IOTC Secretariat has also secured funding from external sources; in recent years, funds sourced from third parties have been well above those allocated by the Commission.

Since April 2002, the Overseas Fisheries Cooperation Foundation of Japan has been assisting developing coastal states in the IOTC Area of Competence with their statistical data collection, processing, and reporting systems, with a view to enhancing the capacity of institutions in those countries and improve their compliance with IOTC requirements for statistics and other scientific data used on the assessments of IOTC species. In recent years, the IOTC has also received substantial funding for capacity building activities from other sources, in particular the Bay of Bengal Large Marine Ecosystems Project (BOBLME), the IOC-SmartFish Project and, more recently, the GEF-Areas Beyond National Jurisdiction Project (ABNJ), and EU DG-Mare.

This document presents the activities undertaken by the IOTC and its partners during the last year (2015), and those activities that will extend to 2016 and following years, where appropriate.

Recommendation

The WPDCS is invited to review the Progress of activities undertaken by the IOTC and its partners and recommend that the IOTC Scientific Committee considers to endorse the future work plan by the IOTC Secretariat. In addition, the WPDCS is invited to consider, where necessary, recommending the implementation of other activities that to its view will lead to improved statistics for IOTC and associated species, including identification of agencies that may be prepared to fund such activities.

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The report covers the following areas:

- Introduction
- Summary of countries and activities undertaken in 2015
- Activities planned for 2016 and following years (where applicable)

Introduction

Table 1 presents the Capacity Building activities that the IOTC and its partners implemented during 2015 to assist developing coastal CPCs in the Indian Ocean, by country and type of activity; and the levels of funding allocated to each activity. Overall, during 2015 the IOTC spent US\$45,794 from its regular budget on capacity building activities² while US\$169,132 were allocated by other agencies.

Table 1. Capacity building activities implemented by the IOTC and its partners during 2015 (up to end-October), including the institutions involved and levels of funding devoted to each activity.

Activity	Executing Agencies	Funding Agency ³ (US\$)	Total Funding (US\$)
Feb 2015: Sri Lanka 1. Workshop to support implementation of the ROS in Sri Lanka. 2. Support to Data Collection and Management activities in Sri Lanka coastal fisheries (PELAGOS database training).	MFARD / NARA Sri Lanka, BOBLME, IOTC consultants, WWF, IOTC Secretariat	IOTC Secretariat (4,994) WWF-Pakistan (~2,000)	~6,994
June 2015: Thailand Data mining: follow-up mission (Phuket)	DoF/AFRDEC Thailand, IOTC Secretariat	OFCF (1500) IOTC Secretariat (~800)	~2300
June 2015: Mozambique Data compliance mission	IOTC Secretariat	World Bank (~800) IOTC Secretariat (~300)	~1100
June – October 2015: Indonesia Indonesia pilot sampling monitoring activities (North and West Sumatra)	DGCF Indonesia, IOTC consultant	BOBLME (58,580) OFCF (11,500) IOTC Secretariat (~3000)	~73,080
Oct 2015: Oman Workshop to support implementation of the ROS in Oman, I.R. Iran and Pakistan	MAF Oman, IOTC Secretariat, CMS, IOSEA, WCS, Gulf Elasmo Project, NOAA, WWF-Pakistan & Five Oceans Environmental Services	EU DG-Mare (29,252) IOTC Secretariat (~34,000)	~91,252
November 2015: Indonesia Technical assistance mission: reporting of catchand-effort, size data and Regional Observer data (Jakarta)	DGCF of Indonesia & IOTC Secretariat (Consultant)	OFCF (6,000) EU-DG Mare (~10,000) IOTC Secretariat (~1,100)	~17,100
December 2015: Indonesia Indonesia pilot sampling: project evaluation and catch estimation workshop (Jakarta)	DGCF of Indonesia & IOTC Secretariat	OFCF (20,000) IOTC Secretariat (~1,100)	~21,100

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² Note that IOTC expenses include both staff salary costs and the amount allocated by the Commission to capacity building activities (US\$115,000 in 2015).

³ *Ditto* 2. Amounts in *italics* represent rough estimates by the IOTC Secretariat and will be updated as soon as information is received from the agencies concerned. In the case of OFCF, expenditure amounts refer only to the operating funds that the OFCF has allocated to capacity building activities and do not include funds that the OFCF allocates to the OFCF Fisheries Expert that manages the Project (*e.g.*, salary), who is based at the IOTC Secretariat in Seychelles.

Table 1. Capacity building activities implemented by the IOTC and its partners during 2015 (up to end-October), including the institutions involved and levels of funding devoted to each activity.

Activity	Executing Agencies	Funding Agency ³ (US\$)	Total Funding (US\$)
December 2015: Tanzania		EU-DG Mare (~1,500)	~2,000
Data compliance mission	IOTC Secretariat	IOTC Sectretariat (~500)	
		BOBLME (58,580)	
		EU DG-MARE (40,752)	
		IOTC Secretariat (45,794)	214,926
		OFCF (39,000)	
		All others (30,800)	

The following section includes a description of the main agencies that contributed funds and other support to capacity building during 2015:

IOTC: The Indian Ocean Tuna Commission allocates funds from its regular budget to the implementation of capacity building activities in developing coastal states that are IOTC CPCs. In 2015, the IOTC Secretariat provided additional assistance to countries in the region, as requested by the Commission in paragraph 7 of IOTC Resolution 11/04:

7. The sampling scheme referred in paragraph 4 will be covered by the Commission's accumulated funds and voluntary contribution on a provisional basis. The Commission will consider an alternative for the financing of this scheme.

The two staff working at the Data and Statistics Section of the IOTC Secretariat were involved in one or more of the capacity building activities referred to in Table 1. The contribution of the IOTC has been estimated in terms of both the working time that IOTC staff spent on capacity building activities during 2015 (salary costs) and the amount used by the IOTC Secretariat from that allocated by the Commission to capacity building activities.

IOTC-OFCF Project⁴: The Memorandum of Understanding between the IOTC and the Overseas Fishery Cooperation Foundation of Japan (OFCF) was initiated in April 2002, with the purpose of enhancing the capacity of developing coastal states in the Indian Ocean region to improve their fisheries statistical systems. Phases I (April 2002 - March 2007), II (June 2007 - March 2010) and III (June 2010 - March 2013) of the Project ran for eleven consecutive years. At the end of Phase III of the Project, the IOTC and the OFCF considered the implementation of a new Phase with the objective of addressing the concerns of the Commission regarding the quality of the data available for some of the important artisanal fisheries in the IOTC Region. Following consideration of the proposal, the OFCF agreed to initiate Phase IV of the Project, which involved the allocation of similar levels of funds to those allocated to Phase III of the Project. Phase IV of the IOTC-OFCF Project focus on the implementation of activities in support of IOTC coastal countries, with a view to strengthening their capacity to comply with provisions in IOTC Resolution 11/04 (Regional Observer Scheme), and a focus on artisanal fisheries. In particular, the Project assist countries to facilitate compliance with the minimum sampling levels recommended by the Commission for artisanal fisheries:

4. The number of the artisanal fishing vessels landings shall also be monitored at the landing place by field samplers. The indicative level of the coverage of the artisanal fishing vessels should progressively increase towards 5% of the total levels of vessel activity (i.e. total number of vessel trips or total number of vessels active).

A new Memorandum of Understanding (MOU) between the IOTC and the OFCF was signed in June 2013, along the lines of those previously existing, including the provision of funds and detachment of an OFCF Expert to the IOTC Secretariat, to coordinate the activities of the Project, along with the IOTC Data Coordinator and other staff from the Secretariat, as required. Phase IV of the Project is now part way through it's third year and will come to an end in March 2016. Activities under Phase IV are reviewed annually, and funds for a new year committed on

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⁴ http://www.iotc.org/data/iotc-ofcf

the basis of results from the Project and mutual agreement by the parties on the continuation of activities, through exchange of letters between the IOTC and the OFCF.

The Project has kept the following three main principles since 2002:

The activities undertaken under the Project follow the recommendations of the Commission and its relevant subsidiary bodies: the Working Parties and the Scientific Committee.

There will be no direct financial implications for IOTC Member countries.

The activities of the Project should be directed towards reinforcing the statistical systems of developing countries from the region.

The current report covers activities on the end of year two of Phase IV of the Project (January - March 2015)⁵ and the third year of Phase IV (April-October 2015).

BOBLME Project⁶: The Bay of Bengal Large Marine Ecosystem (BOBLME) Project is designed to improve the lives of the coastal populations of the Bay of Bengal (Maldives, India, Sri Lanka, Bangladesh, Myanmar, Thailand, Indonesia and Malaysia) through improved regional management of the Bay of Bengal environment and its fisheries. The BOBLME Project is funded principally by the Global Environmental Facility (GEF), Norway, the Swedish Internal Development Agency, FAO, participating Governments and the National Oceanic and Atmosphere Administration (NOAA).

Component 2 of the Project covers Coastal and Marine Natural Resources Management and Sustainable Use, towards development and implementation of regional and sub-regional collaborative approaches to common/shared issues affecting the health and status of BOBLME, including:

- 2.1. Community-based integrated coastal management stock-taking/lesson learning of information and experience for promotion of community-based, fisheries and habitat management; co-management; and alternative livelihoods among fisher communities in the region
- 2.2. Improved policy harmonization obtaining a better understanding of the policy processes and enhanced capacity in the formulation of policy, regional exchange of information on policy and legislation (inputs to SAP)
- 2.3. Collaborative regional fishery assessments and management plans developing collaborative regional fishery assessments, regional and sub-regional management plans, and **harmonization of data collection and standardization to promote collaborative fisheries management approaches**
- 2.4. Collaborative critical habitat management promoting multi-national approaches to manage and address issues affecting transboundary coastal/marine ecosystems within the broader BOBLME region.

Since the inception of the BOBLME Project, the BOBLME Project and the IOTC Secretariat have cooperated in the implementation of capacity building activities in countries participating in the BOBLME Project. As for fisheries data and statistics, the IOTC and the BOBLME agreed to implement joint activities to strengthen data collection and management systems for fisheries that target large-pelagic species, in particular species of pelagic sharks and tuna and tuna-like species.

European Commission – DG for Maritime Affairs & Fisheries (DG MARE)

The mission of the Directorate-General for Maritime Affairs and Fisheries is:

"To develop the potential of the European maritime economy and to secure sustainable fisheries, a stable supply of seafood, healthy seas and prosperous coastal communities – for today's Europeans and for future generations.."

In 2015, DG-MARE agreed to provide the IOTC Secretariat a capacity building grant to fund projects that foster compliance of Conservation and Management Measures (CMMs), in addition to technical assistance to developing countries in the IOTC area to improve the implementation of the at–sea observer scheme and data collection, data compliance and support missions to CPCs, FADs working group and support to science meetings.

Funding is planned to support some of the initiatives detailed in activities conducted in 2015, and also activities planned for 2016, including:

⁵ Note that this refers to the Japanese fiscal year, which runs from April to March of the Julian calendar.

⁶ http://www.boblme.org/project_overview.html

- <u>Data compliance and support missions to CPCs</u>, to assess understanding of the IOTC Data Requirements and how lack of data affects the quality of the scientific advice produced by the IOTC; assess current shortcomings concerning the collection and management of fisheries data, and whether additional assistance is required to implement those actions; agree a plan of action with the CPC required to deliver improvements on the levels of reporting.
- Support for the implementation of the Regional Observer Scheme will take place through the pilot trial and roll-out of an electronic data reporting and management system to facilitate data capture, processing, reporting and management in developing country CPCs. This activity aims to support CPCs in improving the quality and timeliness of data reported according to Resolution 11/04.
- In the case of the FADs working group, support will be provide for developing countries to contribute to the better management of FADs and compliance to their FADs management plans. Support will be further provided to developing countries to attend IOTC Science meetings to all allow them to present their country science reports and scientific papers relating to tuna issues.

ABNJ Project⁷: The Global sustainable fisheries management and biodiversity conservation in the Areas Beyond National Jurisdiction (ABNJ) Program promotes efficient and sustainable management of fisheries resources and biodiversity conservation in the ABNJ.

The 5-year ABNJ Program is comprised of 4 projects. In particular, the Sustainable Management of Tuna Fisheries and Biodiversity Conservation in the ABNJ pilots Rights-Based Management systems and other sustainable fishing practices; reduces illegal, unreported and unregulated (IUU) fishing; and reduces bycatch and other adverse ecosystem impacts on biodiversity.

The IOTC is among the five tuna regional fisheries management organizations that is receiving support from the ABNJ Project.

Summary of countries and activities undertaken in 2015

The following capacity building activities were implemented by the IOTC and its partners in 2014-15:

Support to Data Collection and Management activities in Sri Lanka coastal fisheries (PELAGOS database training): Sri Lanka has very important fisheries for IOTC species in the Indian Ocean and ranks 4th in terms of catches reported to the IOTC. While the Ministry of Fisheries and Aquatic Resources of Sri Lanka has set up sampling in port for its offshore fisheries, the coastal fisheries of Sri Lanka are still not sufficiently covered. In addition, to date Sri Lanka has not reported catch-and-effort and size frequency data as required by the Commission.

In 2015 – following requests for assistance from the Ministry of Fisheries and Aquatic Resources of Sri Lanka – the IOTC Secretariat and BOBLME agreed to provide further technical assistance to the data entry and processing of sampling data collected for the coastal and offshore fisheries of Sri Lanka, following activities in 2013 and 2014⁸. Mr Nishan Sugathadasa (IT Manager, BOBLME) and Mr. James Geehan (Fisheries Statistician, IOTC), visited Sri Lanka during Feburary 2015 to provide further technical assistance to the data entry and validation of sampling data in the PELAGOS database.

A number of recommendations and improvements to the PELAGOS database were agreed between MFARD, NARA and the IOTC Secretariat, including translation of the PELAGOS interface and data validation checks into Sinhala, and merging of databases held by NARA and MFARD. A request was also made for training in catch estimation for coastal fisheries – funded by the IOTC-OFCF Project – based of the results of sampling data entered in the PELGAOS database, to be scheduled in early-2016 (TBC).

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⁷ http://www.thegef.org/gef/ABNJ

⁸ Previous activities have included development of a new sampling design; training of enumerators; development of a new database (PELAGOS); training of database administrators and data input staff, funded jointly by BOBLME and the IOTC-OFCF Project.

Support to the implementation of the IOTC Regional Observer Scheme in Sri Lanka: Sri Lanka has important gillnet-longline fisheries for tropical tunas, and has also reported important amounts of shark catches. However, Sri Lanka has not reported catch-and-effort data consistent with IOTC standards, including separate catch-and-effort data for gillnet-longline gears and for vessels operating outside the EEZ. In 2014, the Sri Lankan Department of Fisheries and Aquatic Resources made a formal request to the IOTC Secretariat for assistance to support the implementation of a national regional observer scheme.

An evaluation, training and planning workshop was held in February 2015 to review the experience and data collected by observers in 2014 and to use the findings to identify key data gaps and quality issues in order to improve the process and develop a working protocol, specific to the Sri Lankan fisheries. 17 participants attended the workshop, comprising the observer scheme manager, and current and future observers. Training was provided in species identification for the main IOTC species groups, sampling approaches and observer debriefing processes. Results from pilot observer trips were reviewed and discussed in detail and a set of recommendations were agreed for the next steps in implementation of the scheme in Sri Lanka.

Workshop to support implementation of the ROS in Oman, I.R. Iran and Pakistan: The sixteenth session of the Scientific Committee (SC16), held in 2013, made a number of recommendations related to training and capacity building to support data collection for gillnet fleets and the implementation of the Regional Observer Scheme:

Paragraph 39: "The SC RECOMMENDED that the Commission allocate funds in its 2014 and 2015 budgets for the IOTC Secretariat to facilitate training for CPCs having gillnet fleets on bycatch mitigation methods, species identification, and data collection methods....[specifically mentioned were:] "two training workshops: I.R. Iran/Oman and Sri Lanka".

It was further noted by the Scientific Committee (SC17) in 2014:

Paragraph 157. "The SC EXPRESSED its strong concern regarding the low level of reporting to the IOTC Secretariat of both the observer trip reports and the list of accredited observers since the start of the ROS in July 2010. Such a low level of implementation and reporting is detrimental to the work of the SC, in particular regarding the estimation of incidental catches of non-targeted species, as requested by the Commission. Capacity building activities are planned for 2015 in I.R. Iran, Pakistan and Sri Lanka in support of the Regional Observer Scheme to assist CPCs with implementation and development of their national programmes".

To date, Oman has initiated an on-board observer scheme, while I.R. Iran have yet to establish a scheme and no information has been received from Pakistan. As all three countries have yet to report observer data to the IOTC Secretariat, as requested in Resolution 11/04, and no catch and effort data have been submitted by I.R. Iran and Pakistan for the gillnet fleets in recent years, the reporting of observer data is particularly important.

While the three countries are at different stages of planning and implementation of their observer schemes, a joint workshop has been proposed to provide training in the new revised interim reporting templates, with a particular focus on species identification and best practice release methods from specialists with a particular emphasis on gillnet fisheries. This workshop will also provide an opportunity for observer scheme managers to learn from each other and share ideas and experiences about the implementation of an observer scheme in CPCs with gillnet fisheries.

This workshop aims to fulfil the requests of the Scientific Committee and the Commission, by supporting the implementation of the Regional Observer Scheme (ROS) through a capacity building training workshop – the first of its kind to be held in the region. The workshop will involve a review of the current status of implementation of the ROS in each CPC to identify key areas where technical support is needed, and discussion of potential solutions to key issues raised based on the experiences of the NOAA gillnet and the WWF-Pakistan gillnet observer programmes. General capacity building will also be provided in terms of the training of observer scheme managers and trainers, with particular emphasis on species identification, data collection and reporting, sampling and debriefing protocols.

This workshop will be led in October 2015 by the IOTC Secretariat in collaboration with CMS, IOSEA, The Ministry of Agriculture and Fisheries of Oman and WWF-Pakistan/ABNJ initiative with inputs from NOAA, the Gulf Elaso project, Five Oceans Environmental Services and the IUCN Cetacean Specialist Group.

Pilot sampling activities North and West Sumatra (Indonesia): In recent years Indonesia has ranked first in terms of catch levels of IOTC species and pelagic species of sharks, as identified by the Commission, in the Indian Ocean. Over the period 2008-2012 Indonesia reported over 20% of the catches of IOTC species and sharks in the

Indian Ocean, with annual catches near to or over 300,000 metric tons, and catches in North (Sumatera Utara) and West (Sumatera Barat) Sumatra representing over 20% of those catches. West Sumatra and North Sumatra have important coastal fisheries and catches of longliners are recorded in the only fishing port, Bungus (West Sumatra). While the longline component in Bungus seems to be properly monitored by enumerators, monitoring of the coastal fisheries in both provinces is deficient, as there is no actual sampling of catches at the landing place.

Pilot sampling activities in West and North Sumatra were initiated following a request for assistance from the Directorate General of Capture Fisheries of Indonesia. Through its request, the DGCF attempts to address both the recommendations from the Data Collection Workshop West Sumatra and IOTC Data Requirements, in particular sampling of coastal fisheries at levels equal or above those recommended by the IOTC (sampling in port of 5% of the fishing activities of artisanal fleets).

Pilot sampling activities began in June 2014 thanks to the support provided by the Bay of Bengal large Marine Ecosystems Project (BOBLME), the Overseas Fisheries Cooperation Foundation (OFCF), the IOTC Secretariat, the DGCF, and the Provincial Authorities of West Sumatra and North Sumatra.

The objectives of the initiative are threefold:

- (i.) To devise a collection and management strategy for fisheries data for coastal fisheries of Indonesia that is in line with national and international data requirements, in particular provisions of the IOTC Regional Observer Scheme, Minimum Data Requirements, and FAD Management Plans;
- (ii.) build capacity in Indonesia to ensure that the government of Indonesia has the ability to maintain the activities once that external support is discontinued;
 - (iii) To use the data collected during the Pilot Project to revise the time-series of catches for West Sumatra and North Sumatra, and facilitate reporting of this information to national and international institutions, as required.

The IOTC Secretariat coordinates all activities under the Project. Field activities are run by the DGCF with the assistance of a consultant. Two monitoring trips by the OFCF-Project Manager and IOTC Secretariat have taken place so far during 2015.

The funding for sampling will be discontinued at the end of October 2015. An end of project report evaluating the implementation of sampling activities, plus catch estimation workshop based on results of the sampling is planned for December 2015, in Jakarta. More information on the results of this activity will be reported to future meetings of the WPDCS.

Data Mining Neritic Tuna in Thailand: follow-up mission Thailand has important purse seine fisheries for neritic tunas, which operate in its coastal waters. Following recommendations from the IOTC Working Party on Neritic Tunas to improve the quality of catch-and-effort statistics for neritic tunas, and attempt the standardization of the CPUE series available, the IOTC-OFCF Project agreed to provide support for an evaluation of the catch-and-effort data collected in Thailand, through a mission to Thailand planned in 2014.

Following the initial data mining mission in June 2014 by the IOTC-OFCF Project, a number of recommendations were made by the IOTC Secretariat to improve the quality of data collection and reporting of fishery statistics by Thailand.

The Andaman Sea Fisheries Research and Development Center (AFRDEC), Phuket, has collected one of the longest time series of size frequency data for coastal fisheries (coastal purse seiners), including data for neritic tuna species, however Thailand has not reported size data to the IOTC Secretariat since the mid-2000s.

A follow-up mission was arranged for June 2015 to provide technical assistance to AFRDEC to facilitate the reporting of the size data to the IOTC Secretariat and improve the levels of data compliance in terms IOTC Resolution 15/02 mandatory statistical reporting requirements.

Since the mission in June 2015, the IOTC Secretariat has provided further advice and assistance to Thailand on the IOTC data reporting guidelines and received the first size frequency data submission (for year 2014) in September 2015. The IOTC Secretariat and Thailand are currently discussing the timetable for submission of the size data for earlier years (i.e., from the early 2000s) currently held in electronic format by AFRDEC.

Mozambique: Data compliance mission

A Compliance Support Mission (CSM) was undertaken in Mozambique from 22 to 26 July 2013 and the IOTC PSM training was conducted from 29 July to 02 August 2013. A follow up mission was conducted from 30 June to 4 July

2014 to provide continued support to Mozambique to strengthen the implementation of active IOTC CMMs, specifically the reporting requirements of data related resolutions (e.g., 10/02, 13/08, 13/03, 11/04, etc.).

The mission was conducted in the form of a training workshop at Mozambique research centre. The participants were from different fisheries sectors collecting data from foreign vessels, national fleet and artisanal fisheries, including fish inspectors.

Based on the outcome of the workshop, Mozambique is recommended:

- To obtain full detailed information from the foreign vessels to be able to report catch and effort.
- To sample all the landing place and raise the data.
- To report complete data for the national fleet, the industrial and artisanal / recreation based on the criteria set by IOTC.
- A follow-up mission will be scheduled for next year to see if Mozambique is complying.

Support to data management Indonesia (catch-and-effort): For a number of years, Indonesia has collected catch-and-effort, size frequency data and observer data from its longline fisheries. However, this information has not been reported to the IOTC.

In 2013, the DGCF of Indonesia requested assistance from the IOTC Secretariat to facilitate reporting of the information available in the format requested by the IOTC. This is one of the activities proposed by the IOTC-OFCF Project, currently scheduled for December 2015. The IOTC Secretariat will prepare the necessary procedures to facilitate reporting of this information prior to start of the mission. Following this work, the IOTC-OFCF Project will visit Indonesia to set-up the procedures required and train staff at the DGCF on how to use them.

Activities planned for 2016

Below is a non-exhaustive list of the capacity building activities planned for late-2015/2016. Several of the activities have been postponed from 2015 due to resourcing issues at the IOTC Secretariat and the departure of the IOTC Data Coordinator (position vacant since March 2015):

- IOTC Data compliance and support Missions: Data support missions are intended to:
- i.) Assess IOTC CPC compliance with IOTC Requirements for scientific data, including IOTC Species and other bycatch, and provisions for the collection of logbook data, implementation of the IOTC Regional Observer Scheme, and data requirements with regards to FAD management plans.
- ii.) Recommend the type of actions that will need to be undertaken to address the issues identified in (i), where any.
- iii.) Agree on a Plan of Action to address the issues identified, including a time frame for the implementation of those actions and the type of indicators to be used in each case to assess progress. The missions will be carried out by staff from the IOTC Secretariat with the assistance of staff from the government institutions concerned in each country.

At least two missions are planned for 2016, funded by the European Union (DG Mare), and the IOTC (regular budget, Capacity Building). Possible data compliance missions identified for 2016: Tanzania, Maldives.

- Support to albacore size frequency sampling in Mauritius: Port Louis in Mauritius is probably the main landing place for albacore in the Indian Ocean. In previous years this was one of the activities proposed for support from the IOTC-OFCF Project and is intended to address concerns from the IOTC Scientific Committee regarding the quality of size data for albacore available for the longline fleet of Taiwan, China. The main objective of this activity is to provide alternative length frequency data through sampling of lengths of albacore at the landing place. The feasibility and usefulness of sampling will be assessed through a mission of the IOTC-OFCF Project to Mauritius.
- Support to the implementation of the IOTC Regional Observer Scheme in Thailand: Thailand has requested assistance for Regional Observer Scheme training for around 20 observers, for the industrial longline fleet. Training will be focused on species (pelagic LL) identification, IOTC data collection processes and reporting requirements, and sampling and debriefing protocols.
- Regional Observer Scheme E-Reporting tool: The IOTC Regional Observer Scheme is a high priority for reducing the level of uncertainty associated with the status of many target stocks and associated bycatch species. Observer data are currently reported to the IOTC Secretariat, in non-electronic and un-standardised format of data submissions, which are currently often provided in formats such as Word, pdf or scanned documents, are not conducive to data management or analysis. This project will develop an e-data reporting

and management system for IOTC CPCs⁹ to improve the consistency, efficiency, quality, timeliness and accuracy of data reporting and management for analysis. This project is targeted particularly at developing country CPCs which have not yet developed observer data collection and management processes and will be an important capacity building tool for these countries. A user-friendly electronic interface will be developed through which observers can record and transmit data that are currently recorded on paper, in Word documents or Excel. E-reporting is now becoming mainstream as a method for collecting data, managing and processing for timely analysis so a range of potential systems should be reviewed and considered, including the smart pdf manager eTUNALOG¹⁰ or eTUBS¹¹ used by SPC.

• Assistance in Catch Assessment Survey of artisanal fisheries in Kenya: In early-2015, the IOTC Secretariat received a request from Kenya for assistance in the processing and analysis of results of a Catch Assessment Survey conducted for artisanal fisheries. In addition, Kenya also requested support in establishing an electronic data—capture and storage system to reduce delays in the data capture and improve timeliness in reporting. Due to resourcing issues at the Secretariat, support for this activity has been postponed until 2016.

It is important to note that implementation of the activities listed above are subject to final confirmation of support by the agencies concerned. The IOTC-OFCF Project, Phase IV, concludes in March 2016; an evaluation of the main outcomes of Phase IV and opportunities for the next Phase of the project will be discussed by the IOTC Secretariat and OFCF in December 2015.

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¹¹ www.spc.int/Oceanfish/en/ofpsection/data-management/spc-members/e-reporting/380-etubs-on-board-observer-entry