

COMM-04-INF-04

Observer Programmes of RFMOs

Secretariat

1. Introduction

The Commission at its 2015 meeting decided to address this item in 2016 as reflected in the 2015 Report: *“In considering its future work programme the Commission recalled the obligation under Article 28 of the Convention to establish an observer programme within 3 years of the Convention coming in to force. The Commission agreed that an item on the establishment of an observer programme be placed on the agenda of the Commission’s next meeting and requested the Secretariat to prepare an information paper summarising the observer programmes of relevant international fisheries management organisations.”*

The following RFMOs that have adopted observer programmes are included:

(a) Straddling Stocks RFMOs

- CCAMLR
- NAFO
- NEAFC
- SEAFO

(b) Highly Migratory Species (tuna) RFMOs

- CCSBT
- IATTC
- ICCAT
- IOTC
- WCPFC

This document focuses on summarising the objective and scope of different RFMO observer programmes, the required observer coverage of the fleets, as well as any information available about the coordination, funding and costs of the regional observer programme. The sources of information are mainly available on the internet; in a few cases, the Secretariats of RFMOs have contributed additional data.

2. Executive Summary

All RFMOs included in this review, have developed one or, in the case of most tuna RFMOs, multiple observer programmes which can vary significantly in scope and in the way they are implemented.

A number of RFMO observer programmes have been set up primarily to collect scientific data (with some compliance tasks included), whereas others are primarily established to monitor vessel compliance with the Conservation and Management Measures (CMMs) of the RFMOs (with some scientific tasks included), e.g. NAFO and the tuna RFMOs transshipment observation programmes.

Often, regional scientific observers are an important (and sometimes the main) source for the collection of fishery data used by the RFMO scientists for stock assessment purposes. It also appears that scientific observers, even if not explicitly used for enforcement purposes, still play an important role in enhancing a vessel’s compliance; their reports usually also include observations of any witnessed infringements and their mere presence appears to have a positive effect on the behaviour of the vessel.

On the other hand, based on the experience of NAFO, an observer primarily tasked with compliance monitoring might have more difficulties in obtaining scientific data that are of value to the RFMOs Scientific Committee. However, it should be noted that in the case of NAFO, the scientists have access to comprehensive scientific data from research surveys, fishery landings and national scientific observer programmes, and therefore are not depending on the RFMO observer programme for their stock assessments. It is also true that NEAFC has opted not to have any regional observer programmes, except for the very special case of exploratory deep-sea fisheries, in view of the extensive national fisheries research programmes of its members and its satisfactory MCS scheme.

The costs for observer training, recruitment, deployment and supervision are usually covered by the flag State of the fishing vessels (and they may recover those costs from their fleets). Most RFMO observer programmes are managed entirely by the flag States of fishing vessels, but others are coordinated and administered by the RFMO Secretariats, e.g. the tuna RFMO observer programmes for transshipment.

In the case of observer programmes administered by the RFMO Secretariats, generally they manage the funds and outsource the actual implementation of the observer programme, i.e. the training, recruitment, deployment and supervision of observers, to commercial service providers. However, all Secretariats, included those who are not directly involved in the administration of the observer programme, are burdened with the processing of observer reports (data input and aggregation of data for distribution following the usual confidentiality requirements) to some degree. These tasks can be quite substantive and can incur significant costs to the organisation, such as those reported by WCPFC.

Usually, the required observer coverage is 100%, with exception of some (mostly scientific) observer programmes from tuna RFMOs, in particular: the tuna longline fisheries by IATTC and WCPFC where only 5% of the operations are required to be monitored by observers; the ICCAT CPC observer programme which only requires 20% coverage on large pelagic trawlers, longline and baitboat vessels; and the IOTC and CCSBT scientific observer programmes which only require 5% (IOTC) and 10% (CCSBT) coverage. In NAFO, the normally required 100% observer coverage can be reduced to 25% for vessels that are technically capable and willing to implement daily electronic reporting of catches.

Data confidentiality protocols apply in all RFMOs and in some cases it is reported that this can obstruct their effective use by scientists. Other issues mentioned by RFMOs related to their observer programmes include the delayed sending of observer reports to the Secretariat, receiving reports written in an unofficial language, the incompleteness of information contained in the reports, and, in some cases, that the level of observer coverage is too low (unrepresentative) to be of use for stock assessment purposes.

3. Brief Description of RFMO Observer Programmes

a. Straddling Stocks RFMOs

CCAMLR – Convention on the Conservation of Antarctic Marine Living Resources

Overview

The CCAMLR (headquartered in Hobart, Australia) was established in 1982 with the objective of conserving Antarctic marine life. CCAMLR has a strong focus on marine research and uses an ecosystem-based management approach for its main fisheries of krill, toothfish and icefish. The organisation has 36 Members (including Acceding States). The Convention Area is defined as the area south of the Antarctic Convergence.

Observer Programme

The CCAMLR Scheme of International Scientific Observation (SISO) was adopted in 1992 under Article XXIV of the Convention which states that “*in order to verify compliance with measures adopted under this Convention, observation and inspection shall be carried out on board vessels engaged in scientific research or harvesting of marine living resources in the area to which this Convention applies, through observers and inspectors designated by the Members of the Commission and operating under terms and conditions to be established by the Commission*”. Although the Convention highlights the compliance role of observers, the actual implementation of the CCAMLR Observer Programme focuses on their scientific

functions (as the name implies) and is deemed to be one of the most important sources of scientific information that is essential for assessing the impact of fishing on the ecosystem, including the status of target populations, as well as those of related and dependent species. SISO also plays a crucial role in developing approaches to reducing the impact of fishing on the ecosystem by collecting data on the effectiveness of mitigation measures.

All vessels fishing in CCAMLR fisheries are required to carry an observer for some or all of their fishing operations. A coverage of 100% of international observers¹ is required for icefish and toothfish fisheries whereas the krill fishery calls for a target observer coverage of 50% using either international or national observers.

Observers record information on the gear configuration (including measures to reduce incidental mortality of seabirds and marine mammals), fishing operations (including catch composition), biological measurements of target and by-catch species, details of fish tagging and tag-recaptures, vessel sightings and data on indicators of vulnerable marine ecosystems. All of these data are submitted to the CCAMLR Secretariat on standardised logbook forms designed for longline, trawl (finfish and krill) and pot (crabs and finfish) fisheries.

The Secretariat coordinates the implementation of the scheme through a network of national technical coordinators designated by Members. The Secretariat has developed a [Scientific Observers Manual](#) which contains a comprehensive range of guidelines and reference materials.

NAFO – Northwest Atlantic Fisheries Organization

Overview

NAFO (headquartered in Dartmouth, Canada) is a fisheries science and management organisation. It was founded in 1979 as a successor to ICNAF (International Commission of the Northwest Atlantic Fisheries) (1949-1978). NAFO's overall objective is to contribute through consultation and cooperation to the optimum utilization, rational management and conservation of the fishery resources of the NAFO Convention Area². The NAFO Convention Area encompasses the Northwest Atlantic Ocean including all EEZs, but the Regulatory Areas is defined as the high-seas portion. The Convention applies to most fishery resources of the Northwest Atlantic except salmon, tunas/marlins, whales, and sedentary species. Straddling stocks are managed by NAFO throughout their range in the Northwest Atlantic. NAFO has 12 Contracting Parties and it has adopted an ecosystem and a precautionary approach.

Observer Programme

The NAFO observer programme started in 1993 with a pilot project and is aimed entirely at enforcement: “*observers would monitor a vessel's compliance with the NAFO Conservation and Enforcement Measures*” (from the 1992 resolution). In 2015, the NAFO Observer Scheme is described under Chapter V of the NAFO Conservation and Enforcement Measures (Article 30). The duties of the observers include verification of logbook entries (e.g. composition and weight of catch, hail and VMS reports); detailed records of daily vessel activities; detailed haul-by-haul data on gear, catch, discards, and effort; monitor the functioning of the VMS; within 24-hours reporting of any infringements of the CEM to an inspection vessel; perform scientific work if requested by the Fisheries Commission; and submit a detailed report at latest at arrival in port. The observer reports are compiled and evaluated by the NAFO Secretariat and used for the verification of other fishery reports and as a source of information for the compliance report.

The observers have to be “independent” and “impartial” but this is not under NAFO’s control. Flag States provide the Executive Secretary with a list of the observers they intend to deploy and it is the flag States which are responsible for the hiring, training, instruction and supervision of the observers (many States

¹ International observers have to be from another flag state than the vessel

² In NAFO’s reformed Convention (adopted in 2007 but not yet ratified by sufficient members) the objective has changed: “The objective of this Convention is to ensure the long term conservation and sustainable use of the fishery resources in the Convention Area and, in so doing, to safeguard the marine ecosystems in which these resources are found”.

delegate these responsibilities to private service providers). Most NAFO observers are of the same nationality as the fishery vessels on which they serve. However, if a vessel is found without carrying an observer, any other Contracting Party may, with the consent of the flag State Contracting Party, deploy an observer to the vessel who may remain onboard until the flag State Contracting Party deploys an observer to the vessel. It appears, though, that this procedure has never been used.

The initial observer coverage in 1993 was of 10% of the vessels; it was increased to 35% of the vessels in 1995 and finally a 100% observer coverage has been in place since 1998.

In recent years NAFO introduced an Electronic Reporting system, under which the observer coverage can be reduced to 25% for vessels that are technically capable and willing to implement daily electronic reporting of catches (by the vessel master, and the observer if present). Comprehensive confidentiality requirements apply for all electronic reports and messages (Article 10, Annex IIB).

A 2002 review of the NAFO Observer Scheme by the NAFO Secretariat shows that in 1997 the daily operating costs for an observer averaged 235 USD (from USD 130 [Faroe Islands] to USD 350 [Japan]). Some NAFO Parties (e.g. Norway, Canada, and Russia) required their industry to pay the costs of observer deployment. In 1997, the NAFO fisheries had a total of 19 000 observer days (i.e. all fishing days, of which 40% were from EU and 30% from Icelandic vessels) and the total costs for the NAFO Observer Programme during that year were about 4 million USD (half of which were borne by the EU and one third by Iceland).

In 2011, the SC reviewed the NAFO observer data for its purposes and noted that while the observer scheme was primarily designed for compliance purposes, it included the collection of information that could potentially be very useful for the work of the SC, e.g. catch composition and discard by haul; however, in actual fact, this information was generally not contained in the observer reports which were thus only of limited value to the SC. In addition, the SC expressed concerns whether the procedures for appointing and training the individual observers would secure the data quality needed. It was also noted that some Contracting Parties had set up their own scientific observer programmes to collect the information required (the national evaluations of these data are shared with the NAFO SC).

In 2015, the most recent NAFO review of its observer scheme, noted that *“there were diverging views on the objectives of a NAFO observer program, with some Parties supporting a program that would collect monitoring and scientific data for the use of any NAFO body requesting it and other views that the dual role might be irreconcilable”* and *“the primary issue centered on the objective of the program and the role of the observers, with diverging views on the dual (scientific/enforcement) role of observers as well as the value of observer data to the scientific community in NAFO”*.

NEAFC – North East Atlantic Fisheries Commission

Overview

NEAFC (headquartered in London, UK) is a fisheries management body established in 1982 as a successor of an organisation founded in 1953. NEAFC has five Contracting Parties; its Convention Area covers most of the North East Atlantic down to Portugal and includes the North Sea but excludes the Baltic and Mediterranean Seas but its Regulatory Area consists of the high-seas parts of the Convention Area. NEAFC's objective is to ensure the long-term conservation and optimum utilisation of the fishery resources in the Convention Area, providing sustainable economic, environmental and social benefits. The Convention applies to all fishery resources except sea mammals, sedentary species, highly migratory species (covered by other RFMOs) and anadromous stocks. Scientific advice is commissioned from a regional advisory fisheries body, ICES (International Council for the Exploration of the Seas). The main fisheries under NEAFC's responsibility are: Redfish, mackerel, haddock, herring, blue whiting and deep-sea species.

Observer Programme

Since 2008, NEAFC requires the presence of a scientific observer on board for exploratory bottom fisheries in the context of the protection of vulnerable marine ecosystems in the NEAFC Regulatory Area. These observers are tasked with the monitoring of catches for evidence of presence of VMEs including species identification (corals, sponges and others) and collection of representative biological samples.

In 2010, ICES developed the “*NEAFC Guidelines for Observers onboard fishing vessels authorised to fish in new bottom fishing areas.*”

NEAFC has addressed the possibility of having a general observer scheme in addition to the one required in exploratory bottom fisheries, most recently at a 2015 Extraordinary Meeting and agreed not to set up an observer scheme for NEAFC, neither for the purpose of control and enforcement nor for scientific purposes. It was noted that there exist different types of national observer schemes and other relevant data-collection schemes in the area and that observers have been considered as not being a cost effective tool for control purposes. However, upon an intervention by the Russian Federation, it was also agreed that PECMAS (Permanent Committee on Management and Science) would be the correct forum to have further discussions on possible observer schemes for the purposes of scientific data collection.

SEAFO – South East Atlantic Fisheries Organization

Overview

SEAFO (headquartered in Swakopmund, Namibia) is a fisheries science and management organisation with the primary purpose to ensure the long-term conservation and sustainable use of all living marine resources in the South East Atlantic Ocean, and to safeguard the environment and marine ecosystems in which the resources occur. It entered into force in 2003 and has seven Contracting Parties; the Convention Area covers the high seas of the South East Atlantic. SEAFO employs an ecosystem and precautionary approach to fisheries management and currently has two main fisheries for deep-sea crab and Patagonian toothfish.

Observer programme

SEAFO has implemented a scientific observer programme which includes the collection of comprehensive fishing activity and biological information used by the Scientific Committee (SC). SEAFO uses standardised observer reporting forms for longline, pots and trawl fisheries (based on the CCAMLR forms), which include vessel, gear and effort details, catch and bycatch information as well as biological data (e.g. weight, sex, maturity) and IUU sightings. It appears that the SEAFO observer reports are the most important source information for the work of the SC.

The observer coverage required is 100% and the costs of training, deployment and supervision of observers are borne by the Contracting Parties.

However, the SEAFO Convention Article 16(3)(c) requires more than a scientific observer programme and explicitly includes a compliance role of observers (e.g. placement of international observers and reporting of apparent violations). Such compliance responsibilities have not yet been implemented by SEAFO and a 2010 performance review of SEAFO noted that consideration should be given to the implementation of an observer programme for compliance purposes and recommended that SEAFO should examine the pros and cons of implementing the provisions on observer programmes set out in Article 16(3)(c) of the Convention.

b. Highly Migratory Species (tuna) RFMOs

Regional Observers Programmes for at-sea Transshipments (ROPTs)

CCSBT, IATTC, ICCAT and IOTC³ have largely harmonised their at-sea transshipment programmes and the texts of Recommendations/Resolutions of these four tuna RFMOs are very similar except that the CCSBT does not include provisions for in-port transshipment⁴. The IATTC, ICCAT and IOTC Secretariats manage the implementation of these ROPTs including the collection of the monies and administration of the accounts. Training, recruitment, deployment and maintaining the regional observer programme

³ WCPFC also requires observers on-board during transshipment operations but these duties are fulfilled by the observers employed under a more general observer programme.

⁴ Measures for in-port transshipment are the same in IATTC, ICCAT and IOTC, and do not require observer verification or transmission of transshipment declarations to the Secretariats.

databases has been outsourced by all to the same Consortium of two commercial service providers (Marine Resources Assessment Group [MRAG] and Cofrepêche). The Consortium produces annual reviews of the ROPT implementation for each RFMO. CCSBT, whose area of application overlaps with the ICCAT and IOTC Convention Areas has signed MoUs with these two RFMOs for monitoring the SBT transshipments. Also, ICCAT and IOTC have signed a MoU for joint observer deployments for transshipment operations spanning their two Convention Areas (with a view of also signing one with the IATTC in case of sufficient overlap).

Under the ROPT, a 100% observer coverage is required on carrier vessels during transshipment operations. The observers are deployed on carrier vessels but one of their tasks consist in checking the catcher vessel's authorisations, catches, VMS, and logbooks before the transshipment takes place. Any detected violations have to be immediately reported to the vessel master. During transshipments, the observers monitor the compliance with the relevant CMM by recording and reporting upon the transshipment activities carried out including geographic position, products transhipped, recording of the name and registration number of the catcher vessel involved as well as verify and certify the data contained in the transshipment declaration. In addition, the observer must issue a daily report of the transshipment activities of the carrier vessel and establish general reports on these activities (with input from Captain) for the Secretariat of the RFMO (within 20 days from the end of the period of observation). The programmes also include a number of responsibilities regarding facilitation of the work of the observer by the both vessels involved in the transshipment. ICCAT also requires that the regional observers observe and estimate quantities of product by species when offloaded in the port where the observer is disembarked to verify consistency with quantities received during at sea transshipment operations.

All transshipment programmes detail the necessary qualifications of observers which include the identification of species and fishing gear, knowledge of the relevant Conservation and Management Measures and accurate observation and recording skills. Furthermore, observers should not be nationals of the flag State or fishing entity (to the extent possible) nor should they be a crew member or employed by the company of one of the vessel's involved in the transshipment; however, they should be capable of communicating in the language of the vessels observed.

The costs of the observers are financed by the flag CPCs of large-scale tuna longline fishing vessels (LSTLFVs) engaged in the transshipments. As an example, the ICCAT fees in 2015 consisted of a start-up fee (for recruitment, training and equipment) of EUR 7 500/7 700 for new vessels/farms/traps to the programme and EUR 3 300 for returning vessels/farms/traps. In addition an annual "mobilisation" fee of EUR 4 400 applies as well as daily deployment fees between EUR 230 and EUR 331. Short-term deployments of one or two days are charged between EUR 5 000 and 5 500 total.

In its 2015 review of the IATTC ROPT, the MRAG notes that the main purpose for deploying observers under the ROPT is to track at-sea transshipment operations between LSTLFVs and carrier vessels and that although observers should be equipped and able to complete all mid-deployment duties, they should know their priorities well and not jeopardize the completion of higher priority duties for the sake of completing less-essential duties.

CCSBT (Commission for the Conservation of Southern Bluefin Tuna)

Overview

The CCSBT (headquartered in Deakin, Australia) is a fisheries management and scientific advisory body with the objective ensure, through appropriate management, the conservation and optimum utilisation of southern bluefin tuna (SBT). The Convention came into force in 1994 and applies to the whole distribution range of SBT (without geographical boundaries). The CCSBT has seven Members.

The CCSBT has developed a scientific observer programme and an observer programme for transshipments at sea.

Scientific Observer Programme

In 2001, following comprehensive recommendations by the Scientific Committee (SC), the CCSBT adopted a scientific observer programme with the overall objective of improving the quality of the data

and information used as input to the stock assessment for Southern Bluefin Tuna (SBT), contributing to the development of reliable indices to monitor future trends in SBT stock size and identifying directions for further scientific research. The information collected by scientific observers includes vessel, trip and gear details, set-by-set catch, discard, effort and environmental information, biological measurements of individual fish, and tag recovery information. The observer reports are confidential and the SC receives (a) highly aggregated Ecologically Related Species (ERS) data, (b) an analysis of the observer information collected by each country, and (c) an observer program implementation report as part of the annual National Reports. A recent performance review of the CCSBT recommended that *“more efforts need to be made to resolve the data confidentiality (regarding observers and operational fishery data) in order to improve the resolution and accuracy of the assessments and precision of the scientific advice.”*

The target scientific observer coverage is set at 10% for catch and effort monitoring for each fishery. Furthermore, it is specified that observer coverage should be representative of different vessel-types in distinct areas and times. The CCSBT recognises that this is not a straight-forward requirement as there are logistical difficulties in achieving statistically relevant observations of fishing operations in high seas fisheries, where the ability of observers to transfer among vessels on the fishing grounds is limited, and under conditions where fleet and fishing behaviour are heterogeneous.

The CCSBT has developed standards for the training of observers, the operation of observer programs and the data to be collected including the forms to be used.

The member countries are responsible for the operation of observers on their flag vessels but an exchange of observers between countries on a regular basis is encouraged to maintain consistency and increase mutual trust in the results of the observer program.

Regional Observer Program for Transshipment by Large Scale Fishing Vessels

A Regional Observer Programme to monitor at-sea transshipments of tuna longline vessels with freezing capacity (LSTLVs) is in place since 2009 (see general description above). The CCSBT transshipment observer program is fully integrated with those of the IOTC and ICCAT (formalised by MoUs) and monitoring SBT transshipments are part of the duties carried out by IOTC and ICCAT observers already deployed on the carrier vessels.

IATTC (Inter American Tropical Tuna Commission)

Overview

The IATTC (headquartered in La Jolla, USA) is a regional tuna science and management organisation first created by the USA and Costa Rica in 1949; it is now established by the Antigua Convention which entered into force in 2010. The IATTC objective is *to ensure the long-term conservation and sustainable use of stocks of tunas and tuna-like species and other species of fish taken by vessels fishing for tunas and tuna-like species in the Convention Area, in accordance with the relevant rules of international law.* The IATTC area of application comprises the East Pacific including the EEZs of North, Central and South American States. It operates by consensus and has 21 Members.

The IATTC has three observer programmes.

AIDCP (Agreement on the International Dolphin Conservation Program) On-Board Observer Program

The 1998 AIDCP On-Board Observer Programme is a key component of the AIDCP and managed by the IATTC Secretariat. The observers are recruited from among IATTC staff or nationals of IATTC Contracting Parties and deployed on-board of purse-seine vessels with a carrying capacity greater than 363 metric tons fishing in the Agreement Area. The main objective is to ensure compliance with the DML (Dolphin Mortality Level) system and other operational requirements of the AIDCP. Flag State Contracting Parties pay the Secretariat an annual fee per fishing vessel (in 2013 expenses totalled almost 2.4 Million USD).

The observer coverage required is 100% and national observers may be added to the IATTC observers. The observers' duties consist in recording dolphin mortality as well as other biological data and information related to fishing operations; they are also required to inform the captain of the vessel of the AIDCP measures and of the record of dolphin mortality of that vessel.

The AIDCP is considered a highly successful programme with recent dolphin mortalities well below 1 000 individuals per year (633 in 2015, corresponding to 0.07 dolphin mortality per set) as compared to over 15 000 animals 20 years ago, i.e. a decrease of over 90%.

Scientific Observers for Longline Vessels (Resolution C-11-08)

In 2008, the IATTC adopted a scientific observer programme for longline fishing vessels greater than 20 metres length. The coverage was set at a minimum of 5% of the fishing effort⁵ with a view to review this level in 2014 after consulting the Scientific Advisory Committee. The scientific observers are mainly tasked with recording catches including species composition and any available biological information as well as any interactions with non-target species such as sea turtles, seabirds and sharks and their reports are made available to the Scientific Committee (in accordance with the IATTC data confidentiality policy and procedures [Resolution C-13-05]).

In 2015, IATTC scientists on staff noted that *“as of the date of publication of this document, five Members have provided summary reports of their observer programs. The information provided is insufficient for a rigorous evaluation of the adequacy of 5% coverage for their longline fisheries. The data show that 5% is too low a level of coverage to allow accurate estimates of the catch of species caught infrequently in those fisheries. In other studies in which large amounts of information has been collected, a 20% level of coverage has been calculated to be adequate to provide reliable estimates of the infrequently-caught species.”* In view of this, the staff recommended a 20% observer coverage of large longline vessels until sufficient information is available to justify a revision. However, a proposal by Mexico (supported by the EU) to amend Resolution C-11-08 accordingly, did not achieve consensus in the Commission⁶ as some Members did not support it, noting that 20% coverage is not feasible and that it is 5% in the WCPFC.

Program for Transhipments by Large-Scale Fishing Vessels

A Regional Observer Programme to monitor at-sea transhipments of large-scale fishing vessels is in place since 2009 (amended in 2012 by Resolution C-12-07) (see general description above).

ICCAT (International Commission for the Conservation of Atlantic Tunas)

Overview

ICCAT (headquartered in Madrid, Spain) is a regional fishery science and management organization established in 1969. It aims at maintaining the populations of tunas and tuna-like species at levels which will permit the maximum sustainable catch for food and other purposes. The Convention Area covers all waters of the Atlantic Ocean, including its adjacent seas. About 30 species are of direct concern to ICCAT, including tuna and tuna-like species as well as several shark species taken as by-catch in the tuna fisheries.

CPC Observer Programme

The CPC⁷ Observer Programme is part of the multi-annual recovery plan for Bluefin tuna in the Eastern Atlantic and Mediterranean. It requires that CPCs deploy observers on vessels and traps active in the Bluefin tuna fisheries on at least 20% of pelagic trawlers, longline vessels and baitboats (all over 15 m) and 100% of towing vessels and harvesting operations of traps. The observers are tasked with the monitoring of compliance, recording and reporting of catch and effort, verification of logbook entries, recording of suspected IUU vessels and, in addition, carrying out scientific data (as instructed by the SCRS). Taking into account confidentiality requirement, the observer information is shared with the SCRS and the Commission.

⁵ The fishing effort to be used was determined by the Scientific Committee in 2012 as being effective days fishing (i.e. excluding transit days).

⁶ Other Members noted the difficulty of increasing observer coverage on longliners for reasons of space and cost, plus a difficulty of complying for vessels transiting from the EPO to the Western and central Pacific, since the WCPFC has a 5% coverage requirement. It was recognized that most Members did not accomplish the current level of 5%.

⁷ CPC means: Contracting Parties and Cooperating non-Contracting Parties, Entities or Fishing Entities

Regional Observer Programme for Bluefin Tuna (ROP-BFT)

The ROP-BFT was also developed as part of the multi-annual recovery plan for Bluefin tuna in the Eastern Atlantic and Mediterranean. It has a compliance focus and requires 100% observer coverage on all purse seiners, during all transfers of Bluefin tuna from purse seiners or from traps to transport cages and at all farms during transfers and harvests. The observer is tasked to observe and monitor fishing and farming operations in compliance with the relevant ICCAT conservation and management measures, sign (clear) the ICCAT transfer declarations and BCDs, and carry out such scientific work, for example collecting samples, as required by the Commission based on the directions from the SCRS.

ICCAT Regional Observer Programme for At-Sea Transshipments (ROP Transshipment)

Since 2007 ICCAT has implemented its Regional Observer Programme to monitor at-sea transshipments for large-scale tuna longline fishing vessels (LSTLFVs) and carrier vessels ((see Rec. [12-06]), see general description above).

In 2015, the responsible service providers (Consortium) noted that the ICCAT transshipment programme was operating smoothly with no specific problem areas. However, they also remarked that observer safety continued to be a priority for the Consortium and given the recent events in the IATTC Regional Observer Programme, they would look at reviewing the equipment issued to observers. This would include issuing them with a personal AIS beacon, to be carried at all times.

IOTC (Indian Ocean Tuna Commission)

Overview

The IOTC (headquartered in Victoria Mahé, Seychelles) is a tuna science and management organisation established in 1993 by the Food and Agriculture Organisation of the United Nations (FAO) under Article XIV of the FAO constitution. As such, the IOTC Members can make decisions concerning the management of tuna and tuna-like resources, and their associated environment, binding on all Members and Cooperating non-Contracting Parties. Its objective consist is *to promote cooperation among the Contracting Parties (Members) and Cooperating Non-Contracting Parties of the IOTC with a view to ensuring, through appropriate management, the conservation and optimum utilisation of stocks covered by the organisation's establishing Agreement and encouraging sustainable development of fisheries based on such stocks*. The IOTC area of competence is the Indian Ocean and adjacent seas north of the Antarctic Convergence; it has 32 Contracting Parties and currently manages 16 tuna and tuna-like species, In addition, the Secretariat collates data on non-target, associated and dependent species affected by tuna fishing operations.

IOTC Regional Observer Scheme

The Regional Observer Scheme was established first in 2009 (amended by Resolution 11/04) for scientific purposes. Its main objective consists in the collection of verified catch data and other scientific data related to the fisheries for tuna and tuna-like species in the IOTC area of competence. The observer coverage required by this scheme is at least 5% of the number of operations/sets for each gear type by the fleet of each CPC. The scheme also requires the sampling of 5% artisanal fishing vessels landings by so-called "field samplers", the costs of which are covered by the Commission⁸. All other costs of the scheme are to be met by the CPCs⁹ who are also responsible to recruit, train and deploy the observers on their vessels. It is up to the CPCs whether to employ nationals or non-nationals as observers on their vessels. CPCs are asked to ensure that observers alternate vessels between their assignments. If the required coverage is not met by a CPC, any other CPC may place an observer (subject to the consent of the CPC who has not met its coverage).

⁸ Through accumulated funds and voluntary contributions until an alternative for the financing is found.

⁹ however, the resolution mentions an IOTC support for developing States, notably the training of observers and field samplers

The duties of the observers comprise the reporting of fishing activities and vessel positions, detailed catch information (for scientific and for logbook verification purposes), gear information, and scientific work requested by the IOTC Scientific Committee.

The observer reports are due within 30 days after the trip and sent to the IOTC Secretariat within 150 days (and to the coastal State in whose EEZ the vessel was fishing, if applicable); the data resolution is prescribed to be 1° by 1°. Upon request, the reports are made available to the Scientific Committee. Data confidentiality rules apply.

IOTC Regional Observer Programme for At-Sea Transshipments (ROP Transshipment)

A Regional Observer Programme to monitor at-sea transshipments of large-scale longline tuna vessels is in place since 2009 (see general description above).

WCPFC (Western and Central Pacific Fisheries Commission)

The WCPFC (headquartered in Pohnpei, Micronesia) is a tuna management organisation from 2004. *The objective of the Convention is to ensure, through effective management, the long-term conservation and sustainable use of highly migratory fish stocks in the western and central Pacific Ocean in accordance with the 1982 United Nations Convention on the Law of the Sea and the 1995 UN Fish Stocks Agreement.* WCPFCs Convention Area comprises the Western Central Pacific (except South China Sea) and it has 26 Members, 8 Participating Territories, and 7 Cooperating Non-members).

Regional Observer Programme (Commission ROP)

The WCPFC ROP has been established pursuant to Article 28 of the Convention which states that the purpose is “*to collect verified catch data, other scientific data and additional information related to the fishery from the Convention Area and to monitor the implementation of the conservation and management measures adopted by the Commission.*” In addition, Article 28 requires that “*the observer programme shall be coordinated by the Secretariat of the Commission, and shall be organized in a flexible manner which takes into account the nature of the fishery and other relevant factors.*” The Conservation and Management Measure that operationalized Article 28 of the Convention is CMM 2007-01. The Commission ROP applies to all vessels authorised to fishing in the Convention Area (high seas and EEZs).

CMM 2007-01 stipulates as number of guiding principles, e.g. that observers under the Commission ROP must be independent and impartial; national observers, if authorised by the Secretariat, may stay on board vessels that principally operate in coastal waters but occasionally venture on the adjacent high seas; that it should provide a sufficient level of coverage as approved by the Commission; and adherence to data confidentiality requirements of the Commission. The Commission ROP also includes guidelines regarding the rights and responsibilities of observers, flag States, vessels operator, captain and crew.

The observer coverage of the ROP stipulated in CMM 2007-1 is 5% of the effort in each fishery under the jurisdiction of the Commission (to be achieved by 30 June 2012). However, after review by the Commission in 2015 the coverage is: 100% for purse seine vessels (based on trips); 5% for long-line vessels (based on trips, number of hook sets, days at sea, or days fished, no. of sets as determined by the CCM); and 100% on fish carriers for all at sea transshipment activities.

As stated above, the Commission ROP is coordinated by the Secretariat; it makes use of existing regional, sub-regional and national observer programmes already in place. However, defined minimum standards apply for an observer programme to be included in the WCPFC ROP (the Secretariat determines whether these standards are reached or not and also monitors and supports the observer trainers and training courses). Furthermore, the Secretariat is responsible to maintain the ROP Manual and ROP Observer Workbook; providing reports on the ROP’s operation to the Commission; coordinating any ROP activities with other RFMOs; facilitating the use of authorised observers in the ROP; encouraging the collection, compilation, storage and dissemination of appropriate information and data as adopted by the Commission; and administer observers for special situations.

For a large part, the costs for the implementation of the ROP are recovered as the vessel operators meet the variable costs of observers’ placement on vessels. However, the ROP-related costs for the WCPFC Commission, in form of data entry expenses incurred by the WCPFC Secretariat are still substantial and

in 2011 amounted to between 850 000 and 900 000 USD (depending on the location of the data entry staff members) (see WCPFC-TCC7-2011/16).