



CCSBT-EC/0610/12

13. International Observer Program

Purpose

To consider a report from the Secretariat on an international observer program for the CCSBT.

Background

It was agreed at CCSBT12 that the Secretariat would prepare a discussion paper on the issues relevant to the establishment of an International Observer Program (IOP) for the CCSBT.

The CCSBT has agreed standards for a scientific observer program for member fleets which fish for SBT. The objectives of the standards are to:

- provide a framework for the alignment of members' scientific observer programs with the objectives of the SRP.
- standardize scientific observer programs across fleets and fisheries among members.
- specify minimum standards for the development of a scientific observer program for members without a program.

Responsibility for the operation of the program and reporting to the CCSBT lies with the Member whose flag is flown on the vessel.

There is a target of 10% coverage for the program. Members have reported different achievements against this target with the outcomes for the far seas fleets being generally lower than the target. For the non-high seas fleets where deployment is easier, higher coverage rates have been reported.

The discussion of this issue at CCSBT12 was in the context of observing for fisheries management rather than scientific purposes. This paper therefore considers the concept of an international observer program in this wider context.

In developing the paper, the Secretariat also examined observer regimes in other regional fisheries management organisations (RFMO).

Observer Regimes in Other RFMOs

A number of other RFMOs operate observer programs or have agreed to implement them:

- Inter American Tropical Tuna Commission (IATTC)
- North Atlantic Fisheries Organisation (NAFO)
- Western and Central Pacific Fisheries Commission WCPFC)
- Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)

IATTC

The IATTC initially established an observer program to collect information to estimate dolphin population sizes, incidental mortality and, information to use as a basis for mitigation methods. It evolved to include collection of compliance information. All large purse-seine vessels are required to carry an observer. There are about 800 trips per year. Broadly, the features of this program are:

1. The total for 2006 was about \$3.5 million and is funded from vessel levies.
2. The observers are employed either by the IATTC or by national observer programs, which can cover up to 50% of the fishing trips of vessels of their nationality. The IATTC Secretariat employs observers by contract on a trip by trip basis. Overall, about 70% of the trips have an IATTC observer.
3. Generally the IATTC program uses observers of the same nationality as the vessel. Where there is a national program, the IATTC observers and national program observers are alternated. When observers return from a trip they are placed at the bottom of a list and the observer at the top of the list is placed on the next available trip.
4. On board protocols and observer accommodation standards have been established by the IATTC
5. Trips vary in length depending on fishing success, the average being about 45 days. Trips longer than 3 months are unusual.
6. Prospective observers generally have an undergraduate college degree in biology. Candidates are given a three week training course and those with satisfactory performance in the course are placed on the list of active observers.
7. The observers complete a variety of forms (e.g. Vessel Activity, set records, marine mammal sightings, flotsam records, compliance with IATTC

management measures). At the end of each trip the observers have a 2 or 3 day debriefing session where their data forms are examined by field office staff. Any possible infractions of the observer program are reported through arrangements similar to those of a compliance committee.

NAFO

NAFO operates an observer program for all fishing activity in its Regulatory Area. Under these arrangements all fishing vessels must carry at least one observer at all times while fishing. Members of NAFO are responsible for providing independent and impartial observers and must ensure that they are able to carry out their duties. Each Member must provide a list of observers it will be using to the NAFO Secretariat. Salary expenses are met by the Member.

The role of observers is both scientific and compliance and includes:

1. Monitoring compliance with NAFO's management and conservation measures by-
 - Recording and reporting fishing activity including the location of fishing
 - Reporting on catch composition, discarding, by-catch and under-sized fish
 - Recording gear type used
 - Verifying log book entries
2. Collecting catch and effort data
3. Carrying out scientific work as requested by NAFO
4. Monitoring the functioning of and reporting on interference with the vessel monitoring system

Infringements are reported to an inspection vessel and to the Executive Secretary. Copies of the infringement reports are available to any Member of NAFO.

WCPFC

At the time of writing this report the WCPFC had agreed on the structure of an observer program but it is not operational as a WCPFC activity. Details of the program's implementation, such as coverage and duties, are to be considered at the next annual meeting of the WCPFC in December 2006.

However, the WCPFC has agreed to a hybrid model for an observer program where:

- Members will choose the source of observers from either national observer programs or the existing programs of the Fisheries Forum Agency or the South Pacific Commission.

- The WCPFC will set data collection standards and be responsible for receiving and managing observer information
- Coverage is likely to reflect existing programs, on which the WCPFC would draw, and this is around 20%.
- The funding of the observer program is not decided. However, it seems likely that the costs of the observers will be met by Members and the costs of the functions in the Secretariat will be met from contributions to the operating budget of the WCPFC.

CCAMLR

CCAMLR operates two programs – the *System of Inspection* (commenced in 1989) and the *Scheme of International Scientific Observation* (commenced in 1992). Both systems are operated by Members with inspectors and observers being appointed by national authorities, which in turn report to CCAMLR via the Member concerned.

The CCAMLR system is structured so that observers and inspectors from a particular member do not attend vessels of that member.

Observation and inspection can be carried out from vessels of the designating Member or from on board vessels being subject to observation and inspection. In the case of observers the designation of scientific observers is a matter arranged bilaterally between the designating Member and the receiving Member. In the case of inspectors, arrangements for scheduling inspections are a matter between the receiving and designating Members. However, inspectors are permitted to board fishing or fisheries research vessels at will provided the vessels are flagged to CCAMLR Members.

The observer program has the following features:

- It is focussed on scientific observation
- Coverage is 100% on all finfish fisheries using longline, trawl and pot gear
- Deployment and training of observers is the responsibility of Members
- Coordination and the storage of data is the responsibility of the CCAMLR Secretariat
- Observers stay on vessels for the duration of fishing activities in CCAMLR waters. Deployments and disembarkations occur at port.

- The average duration of an observer trip is 8 weeks with a range of 2 to 13 weeks.
- Other than for coordination and data storage activities, the costs of the observer program are met by Members.

Discussion

The experiences of other RFMOs can give guidance to the structure of an international observer program for the CCSBT, particularly in terms of purpose, coverage/scope and management arrangements. However, a CCSBT program would also have to take into account the specific nature of the SBT fishery.

In this context a number of distinctive features exist for the CCSBT:

- About 60% of the TAC is caught by distant water longline fleets, which are at sea for long periods of time and at considerable distance from home ports. The vessels return to port infrequently and are re-supplied at sea. Product can also be transhipped with the catching vessel remaining at sea.
- SBT are often a bycatch or when targeted are done so in the context of a longer fishing cruise targeted at a range of pelagic species
- There is a wide range of cultures represented in the masters and crews
- Around 40% of the TAC is fished in Member's EEZs relatively close to home ports.
- A large number of vessels are registered for and participate in the fishery.

In summary, in this environment implementation would be significantly easier and less expensive in some elements than in others raising equity issues for an observation regime across the CCSBT,s membership.

Purpose

The CCSBT has agreed scientific observer standards, which members must apply on their vessels fishing for SBT.

The purpose of an observer program with compliance elements would not be difficult to prescribe. They already exist for Members' domestic fishing activities and in other RFMOs, which could be adapted for application to a CCSBT program.

The discussion at CCSBT12, which lead to the development of this paper, was in the context of compliance. It is therefore assumed that an underlying reason for the

initiative is to improve compliance with CCSBT management measures and be complementary to the scientific observer program. Currently, there are a number of management measures in place:

- a) a TAC and national allocations
- b) an authorised vessel list
- c) the trade documentation scheme
- d) seabird mitigation measures

At the individual vessel level, observation with a compliance role would have a direct relevance to a, b and d.

Observers could not effectively monitor individual vessel activity against national quotas. However they could identify fishing practices such as discarding which could confound catch reporting.

Observers could also monitor transshipping and record vessel details for compliance with the CCSBT vessel register.

If the CCSBT implemented additional management measures, the observers could have a role in their operation.

The FAO has produced a document entitled *Guidelines for Developing an at-sea Fishery Observation Program*. This document provides guidance on observer actions and responsibilities and could be used as a guide for any CCSBT program.

Coverage

Currently, the CCSBT scientific observer standards have a coverage target of 10%. In some elements of the SBT fishery this target is being achieved while in other elements the target is not being met. The differences are quite large ranging from 100% coverage to about 4% coverage. The elements where the target is not being met tend understandably to be those parts of the fishery where the deployment of observers is most difficult for reasons of length of cruise, geographic isolation, fisher resistance and cost. These factors would continue to militate against coverage rates if a compliance function were to be introduced.

Observation for compliance reasons would seem to require a more even pattern of coverage, if only for reasons of equity across all parts of the fishery and CCSBT membership.

The CCSBT would also need to consider what coverage level was appropriate to achieve the compliance aims of the program. The Secretariat is not in a position to propose a figure or a range for coverage. This exercise needs more detailed expert examination. However, the experience of other RFMOs, where there is a compliance function in place, would suggest a high level of coverage (IATTC, NAFO and CCAMLR for example have 100% coverage rates).

The higher the coverage rate the higher would be the cost.

Management Structure

There are three broad structural arrangements available:

- A program operated directly by the CCSBT Secretariat with reporting to Members
- Members to maintain the observer program across their fleets with reporting to the Secretariat
- A hybrid of the two options above

The majority of observer programs operated by other RFMOs use the last two structural arrangements.

The advantages of a program administered by the CCSBT Secretariat are transparency, objectivity and equity. The disadvantages would be cost to Members; difficulties associated with cultural differences in the fleets; the maintenance of the observer pool, either as employees or contractors; and isolation of the Secretariat from actual fishing activity. The Secretariat would have to be expanded considerably to manage such a program and the CCSBT would have to accept the responsibility and the risk of placing employees in dangerous environments.

Member management of their observers would have the advantage of locating management responsibility more closely to the fishing fleet being observed and lower costs for members. The disadvantage is the perception of reduced objectivity. The CCAMLR arrangement of Member s providing observers for other Members vessels is a solution to this problem.

Costs

The costs associated with an observer program are very difficult to determine in the absence of some detail on the structure and coverage of the program. This paper therefore only provides some indicative costs developed by the Secretariat; data from Australia; and some information from programs operated by other RFMOs for longer term cruises. The costs include costs for indirect expenses such as coordination and data management activity.

Organisation /Country	Cost per Month
IATTC	\$4,500 ¹
FFA (US Treaty Program)	\$6,000 plus some fixed costs
ICCAT	\$24,000 ²
Japan	\$23,000
USA	\$28,000
Spain	\$18,000
Australia	\$20,000
New Zealand	\$13,000

¹ Low cost reflects use of observers from low wage countries

² Cost of a program on French and Spanish vessels in late 1990s

Any CCSBT program is likely to have a cost structure similar to that of the Members listed in the table above as these would be the source countries for observers.

As an indication, one observed longline fishing cruise of 60 days could be expected to cost around \$40-50,000. Observation of an Australian purse seine operation and subsequent tow lasting 30 days would cost about \$20,000.

Coverage rates above the current levels being achieved for scientific observation would therefore have significant costs for the CCSBT, Members or fishers if costs were passed on through charges.

In the light of these potential costs, the CCSBT might consider other management/compliance arrangements, which could achieve the same outcomes for less cost.

Prepared by the Secretariat