Progress of the Indian Ocean Tuna Commission concerning the Course of Actions adopted in the First Meeting of Tuna RFMOs

IOTC Secretariat

At the joint meeting of the tuna RFMOs held in Kobe, Japan January 22-26, 2007, key areas and challenges to be urgently addressed through effective cooperation and coordination among the five tuna RFMOs to improve their performance were identified, as well as the technical work considered priority. Below is a summary of the actions taken by IOTC in these areas.

PART I -Key areas and challenges

1. Improvement, sharing and dissemination of data and stock assessments and all other relevant information in an accurate and timely manner including development of research methodologies.

The IOTC database contains data starting in 1950, before the beginning of the industrial fisheries in the Indian Ocean. The Secretariat maintains the database and works with member states and nonmembers having tuna fisheries in the Indian Ocean to improve the data, estimate gaps in the data and assess the overall quality of the data for stock assessment. All data holdings in the public domain are published in the IOTC website. The data situation is routinely reviewed at the start of each species' Working Party meeting and more general issues are reviewed during the first section of the Scientific Committee.

Since 2002, the Secretariat, with direct support from Japan, has been executing a project to strengthen data collection and processing in the region with design, implementation or expansion of sampling programmes in Kenya, Indonesia, Mauritius, Tanzania, Thailand, Sri Lanka, Malaysia, Maldives and Oman. In the context of this programme, the IOTC has also provided training in related areas and it developed specialized software for the management of fisheries information that is supplied at no cost to all interested parties.

Data for stock assessment of the tropical species (yellowfin, skipjack and bigeye tunas) has improved greatly following the above activities and, in particular, with the completion of a region-wide tagging programme, coordinated by the Secretariat, that tagged and released about 200,000 tuna of the three species, in large- and small-scale tagging projects.

These new data have been very influential in the new assessments of tropical species conducted in 2008, when four different assessment analyses were utilized in the yellowfin tuna evaluations, and new analyses were conducted on skipjack and bigeye tunas.

Dissemination of the data for stock assessments among interested scientists is conducted according to a timeline previously agreed. The basic data and other information is supplied by the stakeholders to the Secretariat and, if necessary, further processed and disseminated publicly through the IOTC website, usually about a month prior to the meeting of the Working Party. The Scientific Committee has also agreed to guidelines to facilitate communication and to promote transparency in the presentation of the stock assessment results.

The Working Party on Methods meets when required to analyze in more detail issues related to analysis techniques.

After the reports of the Working Parties, including stock assessments, are finalized, they are posted in the IOTC website, and are available to the general public. This is also the case of the reports of the Scientific Committee that are available about 90 days prior to the Commission meetings.

2. Development, where appropriate, and application of equitable and transparent criteria and procedures for allocation of fishing opportunities or level of fishing effort, including provisions to allow for new entrants.

No specific proposals for allocation mechanisms have been discussed by the IOTC Members, although the management measures adopted to limit fishing capacity require for new entrants to present a 'fleet development plan' (see below).

In 2009, the IOTC Members discussed proposals for catch limits for bigeye and yellowfin tunas, and swordfish that included an allocation of limits based on recent catch levels, although no agreement was reached.

3. Controls, including capacity reduction as appropriate, to ensure that actual total catch, fishing effort level and capacity are commensurate with available fishing opportunities in order to ensure resource sustainability of tuna stocks while allowing legitimate fishery development of developing coastal states, particularly small island developing states and territories.

IOTC Members adopted measures to limit fishing capacity targeting tropical tunas and swordfish and albacore at the level of registered tonnage of the fleets that were actively fishing in 2006 and 2007 respectively (Res 06/05; 07/07 and 09/02). In these measures, there are provisions for the development of fleets in coastal developing states, according to 'fleet development plans' that are to be presented to the Commission, describing the number and type of vessels proposed to be added to the fleets, together with a schedule for the implementation of the plan.

The targets in the limitation of fishing capacity have been consistent with the advice supplied by the Scientific Committee in recent years, although further controls might be necessary if a full implementation of the proposed fleet development plans results in a net increase of fishing capacity in the region.

The Scientific Committee has established a Working Party on Fishing Capacity that will explore the technical issues relevant to the use of fishing capacity as a management tool. A study is currently being carried out to assess with more precision the current level of fishing capacity in the Indian Ocean.

4. Ensuring that management measures are based on the best scientific advice available and consistent with the precautionary approach, particularly, with respect to establishment of effective stock rebuilding measures and other measures to maintain stocks at sustainable levels.

In proposing conservation and management measures, the IOTC member states take into account the advice from the Scientific Committee.

5. Ensuring compliance through establishment of integrated MCS (monitoring, control and surveillance) measures that could include VMS, observers, boarding and inspection schemes, port state controls, market state measures, stronger controls on transshipment, and monitoring of bluefin tuna farming, and the harmonization of those measures across the five tuna RFMOs where appropriate to avoid duplication and increase cost efficiency.

At a special session in 2001, IOTC members agreed to the blueprint for an *Integrated Control and Inspection Scheme*, described in the report of that Session. In subsequent Sessions, the members adopted a numbers of measures that implement a significant part of the Scheme.

In particular, the IOTC Member States adopted a Record of Authorized Vessels (Res 02/05 and 07/02), a Record of Active Vessels (Res 98/04 and 07/04) and a list of IUU Vessels (02/04 and 06/01);

they also adopted mandatory port inspection schemes, providing guidelines concerning implementation (Res 02/01 and 05/03). A more extensive version of the measures, along the lines of the FAO Port Inspection Scheme was discussed in 2008 and 2009, but no agreement was reached.

The use of VMS in all vessels above 15m of length overall is mandatory for all Members (Res 02/02 and 06/03). In 2009, a Regional Observer Programme was adopted (Res 09/04), based on national execution, but coordinated regionally, for both industrial and artisanal fisheries.

Control of transshipment

Projet regional de surveillance

Market measures are recognized as valid tool through the guidelines for their implementation described in Recommendation 03/05 that established a procedure for identification of states that are undermining IOTC conservation and management measures.

6. Application of penalties and sanctions of adequate severity to deter IUU fishing by both nonmembers and members.

Trade restrictive measures may be applied to any party, entity or fishing entity whose activities are considered to undermine IOTC conservation measures.

IOTC member states have agreed to take a number of measures against IUU vessels including limiting access to their port facilities, restriction of imports from IUU vessels, refraining from flagging vessels in the IUU list, and they are to exchange information concerning IUU activities.

As port States, IOTC members are required to adopt a number of steps to prevent unloading or transshipment of fish, or even entry into port of vessels presumed to have engaged in IUU operations as described in Res 05/03.

In addition, Member States have recently completed reviews of their national legislation that include the imposition of severe measures in cases of IUU fishing.

7. Development and implementation of stronger measures to prevent, deter and eliminate IUU fishing, including mechanisms to identify and quantify IUU activities based on trade and other relevant information, a system to exchange information on IUU fishing among RFMOs and among flag states, port states, market states and coastal states, consolidation of the positive and negative lists, as described in section II below, effective control over nationals in accordance with their duties under international law, identification of beneficial ownership and demonstration of "genuine link" and dissemination of relevant information to the public.

In 2009, IUU provisions were reinforced by Res 09/03 that extends the reach of the List of IUU Vessels to include vessels from member states and defines a procedure for reporting of IUU activities. Information on presumed IUU fishing is routinely exchanged between member states through the Secretariat.

Consolidation of the positive lists of the various tuna RFMOs, including IOTC, was conducted in 2007 and updated recently, and posted through the tuna-org website. There is routine sharing of information concerning IUU lists with other RFMOs, although IOTC does not adopt automatically the lists from other RFMOs.

Member States have agreed to investigate allegations and reports concerning engagement of nationals in IUU fishing, and take appropriate action if the activities are confirmed.

8. Establishment and implementation of a system to monitor catches from catching vessels to markets.

IOTC participated in the technical discussions following Kobe considering the harmonization of the statistical document and the adoption of a catch documentation scheme. Such a scheme was proposed at the last Session of the Commission, but no agreement was reached on its adoption.

9. Reviewing the performance of tuna RFMOs in accordance with Annex I.

In 2009, a panel composed of representative of six IOTC Members, an independent legal expert (who also chaired the proceedings), an independent scientific expert and an observer from an NGO, completed a review of the performance of the IOTC Member States in fulfilling the mandate of the IOTC. The performance was conducted based on the criteria recommended at the Kobe meeting, with minor additions.

At the last IOTC Session, the report was presented to all members, who adopted the recommendations together with a plan for their implementation, as described in Res 2009/01.

10. Implementation of the precautionary approach and an ecosystem-based approach to fisheries management including improved data collection on incidental by-catch and non-target species and establishment of measures to minimize the adverse effect of fishing for highly migratory fish species on ecologically related species, particularly sea turtles, seabirds and sharks, taking into account the characteristics of each ecosystem and technologies used to minimize adverse effect.

The Scientific Committee established a Working Party on Ecosystem and By-catch that meets regularly to look at issues related to the implementation of the ecosystem approach including by-catch and mitigation of adverse impacts of fishing.

The IOTC members adopted Res 05/05 concerning conservation of sharks (including data collection provisions and provisions to prevent finning practices), Res 05/08 and 09/06 concerning mitigation of the impact of fisheries operations on sea turtles, Res 05/09; 06/04 and 08/03 adopting measures to reduce the incidental mortality of seabirds in longline operations.

The mandatory statistical requirements for IOTC members were expanded to include collection of data on by-catch, including sharks, through Resolution 08/01.

11.Development of data collection, stock assessment and appropriate management of shark fisheries under the competence of tuna RFMOs.

IOTC has adopted several measures in relation to sharks, Res 05/05 requires annual catch declaration of data on catches of sharks, including historical data when available. Res 08/01 reinforces the data collection requirement by extending the mandatory statistical requirements to include sharks.

There has not yet been a revision of the rule that specifies that vessels should not have on board fins in excess of 5% of the weight of the carcasses. The Scientific Committee recommended consideration of an alternative measure, based on landing fins still attached to the carcasses.

Several IOTC members, but not all, have improved reporting of total catch data of shark species. The implementation of a Regional Observer Programme (see Res 09/04) will expand on the collection of shark catch data at the species level, and biological parameters needed for an assessment.

12. Research and development of techniques to reduce incidental take of juvenile tunas during tuna fisheries, in particular in FAD operations.

No specific research or development of fishing techniques to reduce the catch of juvenile tuna has been reported in the Indian Ocean. New information on FAD related operations has been made available through national observer programmes. Mandatory data requirements have been expanded (Res 08/01) to include more information on the number of FADs deployed throughout the fishing areas.

13. Provision of adequate capacity building assistance, including human resource development, for developing coastal states, particularly small island developing states and territories, towards responsible fishery development, including participation in RFMO and scientific meetings, fisheries data collection and stock assessment and implementation of MCS measures.

The IOTC Secretariat continues to execute a project to strengthen data collection and processing systems in the Indian Ocean, in cooperation with the Overseas Fisheries Cooperation Foundation of Japan. This programme, that started in 2002, concentrated on capacity building in the developing coastal states including the following activities:

- Preparation of country reports documenting fisheries in the region in cooperation with institutions in the region.
- Implementation of field activities in coastal countries intended to strengthen the statistical systems in place.
- Provision of software and hardware to fisheries departments in developing coastal states.
- Training and workshops for officials in the region.
- Recovery and electronic archival of historical data

Participation of scientists from the region in scientific meetings of the Commission was further supported through funds in the tagging programmes dedicated to capacity building.

Capacity building on MCS is conducted in several areas. Support in establishment of national vessel records in Indonesia and Sri Lanka. There were also training courses on port inspection programmes conducted cooperatively with the Indian Ocean Commission. The Secretariat (in partnership with other institutions in the region) continues with the development of integrated software for management of fishery information systems, including vessels data collection and facilitation of tracking of licensing, and in support of port inspection activities. The software is in the public domain to facilitate cooperation between the recipient countries in further development of the system. Support has been also provided on the basis of requests from member states on a number of different MCS-related areas, including support for incorporating IOTC resolutions into national legislation, and advice on their implementation.

Country-Fleet	Document	Field Activities	Training/ Workshop	Hardware/ Software	Historical data
India	Yes		Yes		
Indonesia-longline	Yes	Yes	Yes	Yes	Yes
Indonesia-artisanal	Yes		Yes		
Iran	Yes		Yes		
Kenya	Yes	Yes	Yes	Yes	Yes
Malaysia			Yes	Yes	
Maldives	Yes	Yes	Yes		
Mauritius	Yes		Yes	Yes	
Mozambique	Yes		Yes		
Oman	Yes	Yes	Yes	Yes	
Seychelles	Yes		Yes	Yes	
South Africa	Yes				
Sri Lanka-offshore	Yes	Yes	Yes	Yes	
Sri Lanka-coastal	Yes		Yes		
Tanzania	Yes			Yes	
Thailand-longline	Yes	Yes	Yes	Yes	Yes
Thailand-purse	Yes	Yes	Yes	Yes	
seine					
Yemen					Yes

The table below shows the support activities carried out in various coastal countries.

14. Enhancement of cooperation among scientists, relevant experts and with other relevant fisheries organizations possibly through organization of symposia or working groups on appropriate topics of common interest. Coordination of timing of annual meetings and scientific meetings with a view to avoiding their overlap as well as allowing an adequate interval between scientific and annual meetings and between proposal submission and annual meetings.

Regular contacts are maintained with scientists from other RFMOs, including support for their participation at the IOTC scientific meetings as invited experts. Special workshops have been organized concerning application and design of tagging programmes and fisheries information systems. Annual meetings in Indonesia involving national scientists, and staff from IOTC, WCPFC, and other organizations working in the regions have served as a forum for harmonization of several initiatives to improve existing fishery information systems.

Similarly, IOTC scientists participate in working groups of other RFMOs maintaining close contact about technical developments.

The schedule of meetings is shared amongst tuna RFMOs with the intention to limit as much as possible the overlap between the different organizations.

The meeting of the Scientific Committee is scheduled to take place so that the final report is ready about ninety days prior to the meeting of the Commission so as to allow sufficient time for the preparation and submission of proposals for conservation measures.

IOTC is a partner of other initiatives such as FIRMS and CWP.

PART II. Technical work to cooperate across RFMOs will commence by addressing the following challenges

1. Harmonization and improvement of the trade tracking programs and, as appropriate, development of catch documentation including tagging systems as required.

IOTC followed the activities of the technical working group held in July 2007 on this issue. The Member States discussed a proposal for a catch documentation scheme in 2009, but no agreement was reached.

2. Creation of a harmonized list of tuna fishing vessels that is as comprehensive as possible (positive list) including use of a permanent unique identifier for each vessel such as an IMO number. The positive list should include support vessels. Creation of a global list of IUU vessels.

IOTC collaborated with other RFMOs in creating a global list of authorized vessels based on the positive lists of the individual RFMOs. It has also participated in the work towards the proposed formulation to create unique vessel identifiers that could be shared between RFMOs.

In 2008, the members adopted mandatory reporting of the IMO number as well as gross tonnage as ways to improve the identification of individual vessels.

The Secretariat undertook the update of the global list of authorized vessels for the five RFMOs recently, with more than 18,000 fishing vessel records, around 1,900 authorized by more than one RFMO. The Secretariat participated in the FAO Expert Consultation on the establishment of a Global Vessel Record.

3. Harmonization of transshipment control measures

IOTC has adopted a transshipment monitoring programme that is almost identical to those adopted by ICCAT and CCSBT, creating therefore, an opportunity for cooperation to save costs and duplication of efforts. Formal arrangements with both RFMOs have been agreed upon to facilitate implementation and exchange of information, where appropriate.

4. Standardization of presentation form of stock assessment results

The standard presentation of stock assessment results was adopted by the IOTC scientists and it is being utilized in working party reports.