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Report of the Third Session of the Indian Ocean Tuna Commission

Mahé, Seychelles, 9 - 12 December 1998

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REPORT
of the
THIRD SESSION OF THE
INDIAN OCEAN TUNA COMMISSION

Mahé, Seychelles, 9 - 12 December 1998

INDIAN OCEAN TUNA COMMISSION

VICTORIA, 1999

MEMBERS OF THE INDIAN OCEAN TUNA COMMISSION
AS AT 9 DECEMBER 1998

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ABSTRACT

The Third Session of the Indian Ocean Tuna Commission (IOTC) was held in Mahé, Seychelles, from 9 to 12 December 1998. The Commission approved participation in the Coordinating Working Party on Fishery Statistics (CWP). The Commission took note of the report of the Scientific Committee : in relation to the status of most stocks, this report underlined the inadequacy of present knowledge and the need for further research.

The Commission decided unanimously that it would proceed, from now on, on a regular basis, to collect data on catches of non-target, associated and dependent species (NTADs). The Commission also decided that participation in the Working Parties should be open to interested and competent experts. The Commission endorsed the Scientific Committee's recommendation that catch, effort and size data should be made available routinely to IOTC at the finest possible time and area resolution for stock assessment purposes. The Commission approved mandatory data reporting standards, recognising that these were minimum standards, as well as policy and procedures on data confidentiality.

The Commission agreed to establish a permanent Working Party on Data Collection and Statistics, as well as of Working Parties on Tropical Tunas, Neritic Tunas and Billfish.

The Commission agreed to pursue an appropriate arrangement to deal with the issue of the implications of catches by Taiwan Province of China on the scientific assessment of tuna stocks.

The Commission emphasised the need to control fishing capacity and welcomed voluntary decisions of two Contracting Parties to reduce fleet capacity and avoid fishing in areas and seasons when catches of juvenile tunas predominate. The Commission agreed to consider a draft resolution at its next Session for substantially reducing the fishing capacity of long-distance tuna longline fleets and of taking all relevant measures to prevent or eliminate the operation of flag of convenience vessels in the Indian Ocean. The Commission adopted a recommendation on the registration and exchange of information on vessels fishing for tropical tunas in the IOTC area of competence. The Commission also adopted a resolution on cooperation with Non-Contracting Parties known to have vessels fishing in the Area of competence of IOTC for species covered by the Agreement to urge them to become Contracting Parties or at least to co-operate with the Commission through the exchange of information and statistical data on fishing activities on the stocks falling within the remit of the Commission.

The Commission approved the programme of work and budget, including the hiring of a data manager and a computer programmer. It also agreed that it would be beneficial for both the Secretariat and research institutions in Member States if scientists from such institutions could participate actively in the work of the Secretariat as visiting scientists at IOTC headquarters. The Commission agreed that the calculation of contributions should be based on the verified catch data held by the Secretariat. It was further agreed that no changes could be made to the data used in the calculations unless revised data were received by the Secretariat at least 90 days before the Session at which the budget would be presented. The Commission also agreed that each Member should designate a liaison officer who would be responsible not only for ensuring that the required data were submitted to the Secretariat in a timely fashion, but also for distributing information and documents coming from the Secretariat, and would be the contact person for the Secretariat in that country.

The Commission approved by consensus the suggested changes to the French text of the Agreement, recognizing that in no case did they affect the meaning of the relevant provisions

The Commission approved the election of Mr S. Kandasamy Pather, of Mauritius, as Chairman, with Mr Masayuki Komatsu, of Japan, and Mr Emilio Mastracchio, of the European Community, as Vice-Chairmen.

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INTRODUCTION

1. The Third Session of the Indian Ocean Tuna Commission (IOTC) was held in Mahé, Seychelles, from 9 to 12 December 1998. Representatives of sixteen Members of the Commission, observers from five Nations eligible to become Members of the Commission and observers from five intergovernmental organizations attended the Session. The list of participants is attached as Appendix A.

OPENING OF THE SESSION

2. Mr Joseph Belmont, Minister for Industries and International Business, welcomed the delegates to the Seychelles. In his opening remarks (Appendix B) he thanked the Secretariat for their hard work preparing for the meetings and congratulated them on the remarkable progress achieved since the establishment of the IOTC headquarters in the Seychelles. He noted that the Commission's objectives of ensuring the conservation and optimum utilisation of tuna and tuna-like species and encouraging sustainable development of these fisheries were of crucial importance to the development of many countries, especially small developing States and island States like Seychelles. He pointed out that responsible fishing and good management practices were the only solution for sustainable development of the fisheries, but were possible only with the participation of all those involved. He stressed that the opportunity to make the Commission fully effective and achieve its objectives should not be missed, and appealed to the delegates' spirit of co-operation to work for the success of the Commission.

3. The Vice-Chairman of the Commission, who was chairing the current Session, Mr Emilio Mastracchio (European Community), welcomed the delegates and observers to the Session. He noted that the Commission had reached a new milestone and become fully operational, and could address the conservation and management of tuna stocks in its vast area of competence. IOTC bore the increased responsibilities conferred by the 1995 New York Agreement, and would be reinforced by the membership of a greater number of coastal countries. The task was to target priorities and equip IOTC with the tools necessary to fulfil its mandate. IOTC had to strike a balance between the requirements of resource conservation and management and the socio-economic aspects of fishing, and to this end a multilateral approach was essential, as was an effective system of control. He thanked the Government of Seychelles and the IOTC Secretariat for their hospitality. His speech is reproduced in Appendix C.

ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION (IOTC/S/03/98/1)

4. The Commission adopted the Agenda as presented in Appendix D to this report. The documents before the Commission are listed in Appendix E.

ADMISSION OF OBSERVERS

5. Pursuant to Article VII of the Agreement establishing the IOTC, the Commission noted the presence of observers from five Nations eligible to become Members of the Commission (Comoros, Philippines, Russian Federation, Tanzania and United Arab Emirates) and admitted four intergovernmental organizations (CCAMLR, CCSBT, ICCAT, and SEAFDEC) as observers.

6. The Commission requested the Secretariat to ensure the transmission of the notice of accession of new Members in a timely manner to all Members.

PROGRESS REPORT OF THE SECRETARIAT (IOTC/S/03/98/2)

7. The Secretary, Mr David Ardill, presented this Agenda item. He thanked the Seychelles Fishing Authority and the Government of Seychelles for all their support in establishing the IOTC headquarters and introduced Mr Alejandro Anganuzzi, Deputy Secretary of IOTC. The Secretariat also reported on the First and Second FAO Consultations on the management of fishing capacity,

shark fisheries and incidental catch of seabirds in longline fisheries, and the Commission recognized a need to follow and implement these FAO initiatives. Conversion of the IPTP database was in hand, and it was hoped to set up a Web page soon which would allow access to IOTC publications and data. It was further noted that late submission of data was a problem, which the Scientific Committee had addressed, and that it would help both with this and with the distribution of documents and publications if each Member designated a liaison officer who would act as contact for IOTC in that country. The Secretariat noted that the present staffing level of the Secretariat was insufficient for the work it had to do, and that the Scientific Committee had recommended creating two new posts. The Commission decided to leave any decision regarding the IOTC logo to the Secretariat.

RELATIONSHIP WITH OTHER BODIES

CCSBT

8. The observer from the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) introduced a report (Appendix F) describing the present situation regarding the activities of that Commission.

CWP

9. The Commission approved participation in the Coordinating Working Party on Fishery Statistics (CWP), since it is essential to the execution of the IOTC mandate that it should both conform to the statistical definitions and standards agreed through the CWP and that it be in a position to defend its interests in their establishment.

REPORT OF THE SCIENTIFIC COMMITTEE (IOTC/S/03/98/4)

10. Dr Renaud Pianet, Chairman-elect of the Scientific Committee, presented the report of the Committee (IOTC/S/03/98/4 – Appendix G), which had studied the reviews of the various stocks of tunas presented in the report of the 7th Expert Consultation, held the previous month.

Yellowfin

11. The Commission noted the view of the Scientific Committee that the status of the yellowfin stock was currently unknown and that more evaluation was needed, and endorsed the recommendations that it was necessary to:

a) Develop and apply a comprehensive framework for assessing the status of the yellowfin resources in the Indian Ocean that can accommodate data from the diverse fisheries and account for the uncertainties in stock structure, yellowfin biology and alternative interpretations/hypotheses for catch and effort data. A strategy is needed for providing the necessary resources for doing this and also for ensuring that there is sufficient review of the framework and its application.

b) Develop and implement appropriate, timely and verifiable data collection procedures for all fisheries harvesting yellowfin in the Indian Ocean. The data that need to be collected include catch, effort and size information with sufficient temporal and spatial resolution.

c) Estimate basic biological parameters for yellowfin tuna in the Indian Ocean including stock structure, movement/transfer rates between areas, growth rates, reproductive parameters and natural mortality rates. Estimates should include estimates of uncertainty and consideration of temporal and spatial variability.

d) Develop, implement and analyse the results of a large-scale tagging programme covering the full range of yellowfin sizes and all areas where yellowfin tuna commonly occur.

e) Take into account the recent increases in efficiency of the fleets in the calculation of indices of abundance. Further research is necessary in this area.

Bigeye

12. The Committee noted that there was a distinction between the purse-seine catch of bigeye on fish aggregation devices (FADs), which consists mainly of juvenile fish and the longline fishery, which catches mostly large fish, and that the implications of both fisheries needed to be recognized. The Commission agreed that any controls on fishing for bigeye would ideally be implemented in co-ordination with fisheries management organizations in other oceans, since, otherwise, limiting the fishery in one ocean could lead to increased fishing pressure on the species in other areas.

13. Although the present knowledge of bigeye was poor, there appears to be cause for concern about the condition of the stock, particularly in view of the high level of effort and increased catches of juveniles in the fishery on FADs. However, the beneficial effects of the voluntary moratorium on fishing on FADs by the French and Spanish fleets in the Atlantic were described and the similar moratorium recently imposed in part of the Indian Ocean noted.

14. The Commission endorsed the recommendations of the Scientific Committee that a first step would be to make a comprehensive list of all vessels of all gears catching bigeye, recognizing the difficulties posed by small vessels in artisanal fisheries and flag-of-convenience vessels, and that:

a) The status of the stock should be more precisely determined and a comprehensive stock assessment be urgently carried out to that effect.

b) A long-term collaborative research programme including more basic biological research, improvements in the data collection and tagging needs to be designed and implemented.

Skipjack

15. The Commission endorsed the Scientific Committee's conclusion that regarded the status of stock as uncertain. Similarly, as previously, on the basis of the life history of skipjack and experiences from other Oceans, the Consultation recognized that recruitment overfishing of skipjack is unlikely to occur in the near future. It also endorsed the Committee's recommendations that:

a) The status of the stock should be more precisely determined and a comprehensive stock assessment be urgently carried out to that effect.

b) A long-term collaborative research programme involving more basic biological research, improvements in the data collection and possibly tagging needs to be designed and implemented.

Albacore

16. The Commission noted the conclusions of the Scientific Committee that the stock of albacore appear to have been recovering since the closure of the drift gillnet fishery in 1992 and had therefore made no research recommendations. However, studies in other oceans suggested that the abundance of the species might be more dependent on changes in large-scale environmental conditions than on changes in fishing strategies. It was noted that albacore needed further study in the light of those studies and that, in future, conclusions about the effect of changes in fishing practices should be examined more carefully. The Commission endorsed these conclusions.

Southern bluefin tuna

17. The Commission noted the comments from the Scientific Committee that projection results made by scientists of two of the three CCSBT Members indicated a low probability of recovery under constant current catch scenarios, while those for the third suggest a relatively high probability.

Billfish and other species

18. The Commission noted in particular the high rates of predation by marine mammals on swordfish caught on longlines in the western Indian Ocean, which need further study. It also noted

that artisanal fisheries catch significant amounts of billfishes and other tuna species (principally longtail tuna, kawakawa, frigate and bullet tunas); data are poor and statistics should be improved.

19. The Commission, referring to a study of predation by marine mammals, endorsed the recommendation for further studies of this subject, since the impact of such predation on fisheries could be considerable. It stressed the necessity for studies based on the ecosystem approach to fisheries management, and requested the Secretariat to contact countries with experience in the matter, such as Canada, Norway, and Iceland, and other international fisheries organizations, such as ICLARM, NAFO, IWC, ICES and FAO, to gather more information about this issue and to request scientific advice.

Tagging

20. The Commission endorsed the conclusions of the Scientific Committee recognizing the importance of tagging programmes for stock assessment. It agreed that, before any tagging was undertaken, it would be necessary to determine specific terms of reference, including clear objectives and priorities for tagging programmes in line with the research requirements for the target stocks. It also endorsed the recommendations that:

a) There is no substitute to a conventional tagging programme for a better assessment of the resources, even if tagging with electronic devices is also recommended;

b) Other species must be tagged if opportunities arise;

c) A limited number of taggers should be involved to limit the biases due to individual variability;

d) Double tagging has to be carried out to estimate the tag shedding rate, and tag seeding experiments carried out when possible to estimate recovery rates;

e) For the validation of growth, the strontium-chlorine technique should be preferred to OTC tagging;

f) To be fully successful, a tagging programme requires substantial resources in the recovery procedures, which can represent large investment;

g) An awareness programme targeting all the fishermen and canneries active in the Indian Ocean must be launched before operations are started.

Issues related to bycatch and discards of tuna fisheries

21. Upon the recommendation of the Scientific Committee, the Commission decided unanimously that it would proceed, from now on, to collect data on catches of non-target, associated and dependent species (NTADs) on a regular basis.

Participation in Working Parties

22. The Commission endorsed the Scientific Committee's recommendation that participation in the Working Parties should be open to interested and competent experts, in order to ensure the transparency of the scientific process. However, it recognized that such participation might have to be restricted for logistic and practical reasons.

Statistical requirements

23. The Commission endorsed the Scientific Committee's recommendation that catch, effort, and size data should be made available routinely to IOTC at the finest possible time and area resolution for stock assessment purposes.

24. The Commission approved the mandatory data reporting standards recommended by the Scientific Committee (Appendix H), recognising that these were minimum standards, and that they should be further examined by the permanent Working Party on Data Collection and Statistics.

25. The Commission noted that it was essential that all the fishery data be available in due time to allow the monitoring of stocks and analysis of the data. It approved the following rules for the submission of data:

a) Surface fleets and other fleets operating in coastal zone must provide their fishery data at the earliest possible date but no later than the 30 June each year (data for the previous year).

b) Longline fleets operating in the high seas must provide the provisional fishery data at the earliest date, but no later than before 30 June (data for the previous year). They must provide the final estimate of their fishery data before December 30th each year (for the previous year data).

Confidentiality policy on data submissions

26. The Commission approved the Scientific Committee's recommendations on data confidentiality policy and procedures, as presented in Appendix I.

Establishment of Working Parties

27. The Commission noted the recommendations of the Scientific Committee regarding the establishment of Working Parties, and agreed to establish a permanent Working Party on Data Collection and Statistics, to begin its work as soon as possible. To facilitate this, the Secretariat was asked to draft terms of reference for the Working Party, which would be circulated to members, and to organise any necessary intersessional work.

28. The Commission further approved the establishment of Working Parties on: (1) Tropical Tunas, (2) Neritic Tunas and (3) Billfish. The agenda for the first meeting of the Working Party on Tropical Tunas should include an item for the examination of terms of reference for a Working Party on tagging, not to plan the tagging programme in detail, but to consider its objectives and requirements.

29. The Commission agreed that, in order for the Working Party on Tropical Tunas to work effectively at its first meeting, the preparatory work should be done in conjunction with the Secretariat, which would coordinate and facilitate the required tasks. The Working Party should concentrate on one species at a time, with bigeye tuna as the first species to be addressed. To facilitate this, the Secretariat was asked to draft terms of reference for the Working Party, which would be circulated to members, and to organise any necessary intersessional work. These terms of reference will include a specific instruction to address the question of fishing capacity.

30. The Commission adopted a resolution on southern bluefin tuna (Appendix J), by which it agreed to review, at its Fourth Session, the progress made in overcoming existing difficulties among CCSBT members and, if necessary, to decide whether a Working Party on southern bluefin tuna or on temperate tunas should be established to advance the effective conservation and optimum utilization of that species.

An examination of the implications of catches by Taiwan Province of China on the scientific assessment of tuna stocks

31. The Commission took note of the report of the Scientific Committee on the implications of catches by Taiwan Province of China on the scientific assessment of tuna stocks and agreed to pursue an appropriate arrangement to deal with this issue.

Commission decisions

32. In discussing the Scientific Committee's report, the Commission emphasized the need to control fishing capacity and welcomed Japan's decision, in response to the FAO Consultation on the management of fishing capacity, to reduce the capacity of its longline fleet by 20 %. The Commission also welcomed the voluntary moratorium applied by the EC purse-seine fleets on FAD fishing over

part of the year in the western Indian Ocean and the Multi-Annual Guidance Project which, since 1983, establishes binding objectives for the reduction of the EC fleet.

33. Japan stressed the importance of concerted action by member States with long-distance tuna longline fleets and of substantially reducing the fishing capacity of the leading Asian long-distance tuna longline fleets and of taking all relevant measures to prevent or eliminate the operation of flag of convenience vessels in the Indian Ocean. Australia, India and Japan presented a draft resolution (Appendix K) to that effect. The Commission agreed to consider the proposal at its next Session, based on all relevant information, including the opinion of the Scientific Committee.

34. Particular concern was expressed about the activities of flag-of-convenience vessels, and the need was stressed to include all nations in the data collection process. To this end the Commission adopted a recommendation on the registration and exchange of information on vessels fishing for tropical tunas in the IOTC area of competence (Appendix L).

35. The Commission also adopted a resolution on cooperation with Non-Contracting Parties, instructing the Chairman of IOTC to send a letter to all non-Contracting Parties known to have vessels fishing in the area of competence of IOTC for species covered by the Agreement to urge them to become Contracting Parties or at least to cooperate with the Commission, through the exchange of information and statistical data on fishing activities on the stocks falling within the remit of the Commission (Appendix M).

PROGRAMME OF WORK AND BUDGET FOR 1999 (IOTC/S/03/98/5)

36. The Secretariat presented document IOTC/S/03/98/5, which summarised the work carried out during the current year and outlined a programme of work for the biennium. The proposed activities of the Secretariat were divided into core functions and technical support operations. The former includes organization of meetings, maintenance of databases and publication of reports, scientific papers, information products and data. The latter includes support for subsidiary bodies established by the Commission and for Members. The document also included a provisional budget for the planned activities and a scale of contributions from the Member States. Japan asked for a more detailed explanation of each budget line and also proposed an audit external to that of FAO. The Secretariat provided an explanatory note on the budget. The representative of the FAO legal office informed the Commission that the Basic Texts of the Organization do not permit the intervention of an auditor other than the External Auditor, officially appointed, of the Organization. The FAO External Auditor has total freedom of choice and acts on his own initiative; the FAO Finance Committee alone is empowered to recommend that the Secretariat of IOTC should be audited.

37. The Commission approved the programme of work and budget (Appendix N) for the Secretariat and endorsed the unanimous recommendation of the Scientific Committee that the current staffing of the Secretariat be increased to further improve its current capacity for statistics and the co-ordination of proposed research. It approved the hiring of (1) a data manager, who would allow the Deputy Secretary to concentrate more on stock assessment by taking over some of his current work, and (2) a computer programmer. It also agreed that it would be beneficial for both the Secretariat and research institutions in Member States if scientists from such institutions could participate actively in the work of the Secretariat as visiting scientists at IOTC headquarters.

38. The Republic of Korea expressed its dissatisfaction with the formula used to calculate the contributions of Member States. Other delegations noted the lengthy negotiations that preceded the adoption of the current formula and expressed their reluctance to reconsider the issue at this stage.

39. An extensive discussion ensued after two delegations noted discrepancies between the catch information available to them and that used in the calculation of their contributions. The Commission agreed that the calculation should be based on the verified catch data held by the Secretariat. It was further agreed that no changes could be made to the data used in the calculations unless revised data were received by the Secretariat at least 90 days before the Session at which the budget would be presented, in order to allow the Secretariat to comply with its obligation of circulating the documents for the Session 60 days in advance.

40. The Commission also agreed that each Member should designate a liaison officer who would be responsible not only for ensuring that the required data were submitted to the Secretariat in a timely fashion, but also for distributing information and documents coming from the Secretariat, and would be the contact person for the Secretariat in that country. The Members undertook to inform the Secretariat of the name of this contact person within 30 days after the end of the current Session.

41. The Secretariat presented the financial statement to 15 November 1998, and noted a shortfall of some 10 % in the contributions from Members to date. He said that this was not causing difficulties at the moment, but that if the situation continued it might lead to curtailment of some of the planned activities. Several delegations stated that the proper authorities had not been notified by FAO about their contributions. It was noted that communication needed improvement and that the designation of a liaison officer should help to alleviate this problem in future. Members were requested to send copies of all correspondence and documentation regarding payments to the Secretariat, to allow the Secretariat to follow up directly with FAO Headquarters should any problems arise.

42. The Commission agreed that Seychelles should be allowed to pay its contribution in Seychelles rupees, since the Secretariat's local annual expenditure exceeded the amount of that contribution.

43. The Secretariat informed the Commission that, although the unspent balance of funds from the IPTP had been allocated to IOTC, it had not yet been possible to obtain the funds. The Commission agreed that efforts should be made to secure this money as soon as possible.

CORRECTIONS IN THE TEXT OF THE IOTC AGREEMENT (IOTC/S/03/98/6)

44. The FAO legal advisor introduced this agenda item on the basis of document IOTC/S/03/98/6, and the Commission approved by consensus the suggested changes to the French text of the Agreement (Appendix O), recognizing that in no case did they affect the meaning of the relevant provisions.

DATE AND PLACE OF THE SECOND SESSION OF THE SCIENTIFIC COMMITTEE AND THE FOURTH SESSION OF THE COMMISSION

45. The Commission accepted by consensus the invitation of the Japanese delegation to host the Second Session of the Scientific Commission and the Fourth Session of the Commission in December 1999, with the exact date and venue to be determined at a later date. Japan undertook to cover any relevant additional costs incurred as a result of holding the meeting in Japan in excess of those allowed for in the budget.

ANY OTHER MATTERS

46. No other matter was discussed.

ELECTION OF THE OFFICERS FOR THE BIENNIUM

47. The Commission approved the nomination of Mr S. Kandasamy Pather, of Mauritius, as Chairman, with Mr Masayuki Komatsu, of Japan, and Mr Emilio Mastracchio, of the European Community, as Vice-Chairmen.

ADOPTION OF THE REPORT

48. The report of the Third Session of the Indian Ocean Tuna Commission was adopted on 12 December 1998

APPENDIX A
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APPENDIX B
OPENING REMARKS BY MR JOSEPH BELMONT, MINISTER FOR INDUSTRIES AND INTERNATIONAL BUSINESS

First of all, let me thank you for being here this morning for the opening of the meeting of the Indian Ocean Tuna Commission. I wish you a very warm welcome to the Seychelles and hope that your stay with us will be a pleasant one. It is a great honour for me to address this august assembly on behalf of my country, and on behalf of my colleague, the Minister of Agriculture and Marine Resources, Mr Ronny Jumeau who is at this moment on a mission abroad.

I would be remiss in my duty if I did not thank the Secretary of IOTC and all his team who have spared no effort in the preparation of the meeting of the Scientific Committee and of the Commission. Since Mr Ardill took up his duties at the beginning of the year, the CTOI has accomplished a remarkable job. I only need cite for example the meeting of experts last month, the scientific meeting, and the 1987-1996 data summary which has just been published.

Mr Chairman, the primary objective of the Commission is to promote cooperation among its members with a view to ensuring, through appropriate management, the conservation and optimum utilization of tuna and tuna-like species and encouraging sustainable development of these fisheries.

For many countries, especially small developing States and island States like Seychelles, this objective is of crucial importance to their development. Seychelles with no mineral resources and small landmass has to depend on its living marine resources and natural beauty for the well-being of its people. Proper fisheries management is not a luxury, it is a necessity. If the tuna stocks were to collapse or suffer any decline, the impact on the Seychelles economy would be very serious. Fishing licences, port dues, employment on vessels, and now more importantly the tuna canning factory, which is the single most important employer in the country, are all closely dependent on the state of the tuna stocks. It must however be pointed out that, though coastal countries benefit from the resource, by far a much bigger share of the economic benefits of the fishery go to the long-distance fishing fleets. Distant-water fishing fleets can move from ocean to ocean, from an ocean where the stocks are depleted to one where they are not. Countries in the Indian Ocean cannot afford to do that.

Nevertheless, because of the fact that small developing coastal countries have more fragile economies they are the most severely affected when things go wrong. It is also far from easy for these countries to build up a substantial tuna fishing capacity. Development of industrial fishing fleets especially of purse seiners and even of longliners is often beyond the means of small developing countries.

Responsible fishing, which also means good fisheries management practices, is the only solution towards the sustainable development of the fisheries. Serious attention should be devoted to this matter. The recent measures by the French and Spanish purse-seine fleets for a voluntary moratorium on fishing on fish-aggregating devices for a two- month period in the Western Indian Ocean is a move in the right direction. Responsible fishing will only be possible if we have the participation of all those involved in the fishery. This is well illustrated in the preamble of our Commission, which states that co-operative measures are required by both the coastal States of the Indian Ocean and other States whose nationals harvest tuna and tuna-like species in the region. We must, for our sake and for those of future generations, not miss the opportunity to make the Commission fully effective and achieve its objectives.

Mr Chairman, Ladies and Gentlemen, I appeal to the spirit of cooperation of all of you to work for the success of your Commission.

To those who visit the Seychelles for the first time, may I suggest that, depending on your programme, you find some time off to visit our country. I sincerely hope that you will bring back to your respective countries some happy memories of a pleasant stay with us.

I should like now to declare open the 3rd Meeting of the Indian Ocean Tuna Commission and I wish to you success in your deliberations.

APPENDIX C
OPENING REMARKS BY THE CHAIRMAN OF THE COMMISSION, MR EMILIO MASTRACCHIO

On December 3, 1996, the Indian Ocean Tuna Commission held its first session in Rome at the head office of FAO. That was 2 years ago. We were then at the launch of this new, necessary and important regional fisheries organization for the conservation and management of the tuna stocks of the Indian Ocean. Today, December 9, 1998, our Commission is holding its 3rd annual meeting, and we have entered a new stage in the evolution of this Commission with the first meeting of the Scientific Committee in Victoria on December 7 and 8. Two years of preparatory work dedicated to setting up this Commission enable us today to reach a new milestone in the history of the IOTC, and become fully operational, all in conformity with the provisions of the Agreement establishing the IOTC and its rules of procedure. Our organization has just reached cruising speed, which will allow it to address the conservation and management of tuna stocks in its vast area of competence, which links several continents.

This evolution of the IOTC is in line with the increased responsibilities which the 1995 New York Agreement confers on IFOs, which thereby become the competent and active organizations for the conservation and management of fish stocks. The IOTC is by definition the regional fisheries organization covering the Indian Ocean, and should therefore be open to all the coastal countries of this Ocean, and I believe, ladies and gentlemen, that the viability, the effectiveness, and the sense of responsibility of this organization would be reinforced by the membership of a greater number of coastal countries. The tasks which await us and the challenges facing this young organization incite us to be vigilant, not to yield to the euphoria of promising beginnings but rather to establish guidelines, to target priorities, to equip the IOTC with the tools which will allow it to improve its system of data acquisition, promote scientific research based on carefully considered options, and develop co-ordination and fruitful co-operation with the other IFOs which cover our seas and oceans.

The IOTC, like all IFOs, will have to strike a delicate balance between the requirements of resource conservation and management on the one hand and the socio-economic dimensions of fishing activities, and more specifically tuna fishing, on the other. The agenda of our session draws our attention to several important points such as the report of the Scientific Committee, the 1999 programme of work and budget, and the relations between our organization and other IFOs. This demonstrates that we are serious about our involvement and our certainty that the problems of management and conservation of marine resources, especially those related to migratory species, cannot be dealt with and regulated effectively except within the framework of a widened multilateral approach.

The panoply of measures and recommendations which the IOTC will come to take should be reinforced by the existence of a effective system of control.

The Indian Ocean, ocean of passage, ploughed since the age of the great navigators, is today the scene of intense fishing activity by a multitude of tuna fleets, and it is in the interests of all of us, coastal countries and fishing countries, contracting parties and non-contracting parties, to cooperate and mobilize in order to better manage this fisheries resource and thus guarantee its survival in perpetuity.

Before closing these few words, allow me to express to you, Mr Minister, our pleasure in being here in Seychelles for a few days in these enchanting surroundings, and to the Secretariat of the IOTC and to its Secretary, Mr Ardill, my thanks for the hospitality and the welcome which we are enjoying.

APPENDIX D
AGENDA OF THE SESSION

1. Opening of the Session
2. Adoption of the agenda and arrangements for the Session (IOTC/S/03/98/1[E])
3. Admission of observers – for decision
4. Progress report of the Secretariat (IOTC/S/03/98/2[E])
5. Relationship with other bodies
6. Report of the Scientific Committee (IOTC/S/03/98/4[E])
7. Programme of Work and Budget for 1999 – for decision (IOTC/S/03/98/5[E])
8. Corrections in the text of the IOTC Agreement – for decision (IOTC/S/03/98/6[E])
9. Date and Place of the Second Session of the Scientific Committee and the Fourth Session of the Commission – for decision
10. Any other matters
11. Election of the Officers for the Fourth and Fifth Sessions of the Commission
12. Adoption of the report

APPENDIX E
LIST OF DOCUMENTS

MEETING DOCUMENTS

1.	IOTC/S/03/98/1[E]	Provisional annotated Agenda
2.	IOTC/S/03/98/2[E]	Progress report of the Secretariat
3.	IOTC/S/03/98/3[E]	Relationship with other bodies: Coordinating Working Party on Fishery Statistics
4.	IOTC/S/03/98/4[E]	Report of the First Session of the Scientific Committee
5.	IOTC/S/03/98/5[E]	Programme of Work and Budget of the Secretariat
6.	IOTC/S/03/98/5 Add.1[E]	Programme of Work and Budget of the Secretariat - Revised Scale of Contributions
7.	IOTC/S/03/98/5 Add.2[E]	Programme of Work and Budget of the Secretariat – Financial Statement
8.	IOTC/S/03/98/6[E]	Note on the corrections to the French text of the Agreement for the establishment of the Indian Ocean Tuna Commission

INFORMATION PAPERS

9.	IOTC/S/03/98/Inf.1[E]	List of Documents
10.	IOTC/S/03/98/Inf.2[E]	List of Participants
11.	IOTC/S/03/98/Inf.3[E]	The Coordinating Working Party on Fishery Statistics, Its Origin, Role and Structure
12.	IOTC/S/03/98/Inf.4[E]	Report of the Second Session of the Indian Ocean Tuna Commission
13.	IOTC/S/03/98/Inf.5[E]	Agreement for the Establishment of the Indian Ocean Tuna Commission

DOCUMENTS AVAILABLE

14.	IOTC/SC/98/2[E]	Report of the Seventh Expert Consultation on Indian Ocean Tunas
15.	IOTC Data Summary No. 18 – Indian Ocean Tuna Fisheries Data Summary 1987-1996	

APPENDIX F
COMMENTS OF THE CCSBT REPRESENTATIVE

BACKGROUND

The objective of the Convention for the Conservation of Southern Bluefin Tuna (CCSBT) is to ensure, through appropriate management, the conservation and optimum utilisation of southern bluefin tuna throughout its migratory range. The Convention establishes the Commission for the Conservation of Southern Bluefin tuna, with the current membership being Australia, Japan and New Zealand.

The CCSBT is required to decide upon the total allowable catch and its allocation among the Parties to the Convention unless the CCSBT decides upon other appropriate measures. CCSBT members have maintained total catches at 11,750 tonnes each year between 1989 and 1997, of which 6065 tonnes has been allocated to Japan, 5265 tonnes to Australia and 420 tonnes to New Zealand. Members have not yet been able to reach agreement on the total allowable catch for the current year.

ISSUES

There are a number of uncertainties relating to the assessment of the state of the SBT stock and at its meeting in August 1998 the Scientific Committee of the CCSBT developed a number of research needs for consideration by the CCSBT at its next meeting. The work of the Scientific Committee was improved in 1998 by the establishment of a separate Stock Assessment Group which met prior to the Scientific Committee meeting to undertake the detailed data analysis required for the stock assessment. In conjunction with the 1998 Scientific Committee meeting, an independent review of the scientific assessment process was undertaken to establish whether improvements could be made to the scientific analysis and stock assessment processes. A key recommendation in the independent review report is that some form of independent assessment should be introduced into the existing scientific process. The findings of this report will be considered at the next meeting of the CCSBT.

While CCSBT members have limited catch levels in recent years, increased catches of SBT in recent years by non members are reducing the effectiveness of the CCSBT's management efforts. Non-member annual catches are now estimated to be at least 4,000 tonnes. A high priority is therefore being given to the establishment of appropriate arrangements with Indonesia, Korea and Taiwan Province of China who are not currently members of the CCSBT but whose fleets take significant quantities of SBT.

The Commission is concerned at the significant increase in catches of SBT by non-members in recent years. In this regard the CCSBT has determined an Action Plan which, amongst other things, determines that the annual catch of SBT by non-members should be no more than 2,550 t. Possible arrangements have already been proposed to Korea and Taiwan Province of China through a joint demarche in April 1998. Further discussions with them, and in due course with Indonesia, will be needed to progress this matter.

In July 1998 CCSBT member representatives met to consider a scheme to collect more accurate and comprehensive information on SBT fishing through SBT trade data, with a view to evaluating and designing such a scheme. Recommendations from that meeting will be considered at the next meeting of the CCSBT.

The CCSBT's Ecologically Related Species Working Group met in June 1998 and developed a number of proposals for consideration by the CCSBT including proposed guidelines for the design and deployment of tori lines to minimise the incidental take of seabirds, a programme of research priorities for mitigation measures and a programme for educating fishers to minimise the incidental taking of seabirds.

The following SBT matters may be relevant to the IOTC meeting:

SBT Data

the CCSBT is seeking to refine its assessment of the state of the SBT stock and would welcome advice of any SBT catch and effort data collected by IOTC or its members who are not members of CCSBT,

-the CCSBT would also seek to establish longer term arrangements with IOTC for the exchange of relevant scientific information and reports and information on fisheries management.

Cooperation with CCSBT management arrangements

Effective management of SBT requires the cooperation of all countries and entities in the implementation of the CCSBT management arrangements. To achieve this, the CCSBT invites any other State whose vessels engage in fishing for SBT or any other coastal State through whose exclusive economic or fishery zone SBT migrates, to join the CCSBT and for entities to cooperate with those management arrangements,

CCSBT would also welcome the opportunity to enter into cooperative arrangements with other organizations or entities to achieve the objective of the Convention.

APPENDIX G
REPORT OF THE FIRST SESSION OF THE SCIENTIFIC COMMITTEE

1. The First Session of the Scientific Committee of the Indian Ocean Tuna Commission (IOTC) was held at the Victoria Conference Centre in Victoria, Seychelles, on 7 and 8 December 1998. It was attended by representatives of IOTC Members, Observer Nations, and Observer Intergovernmental Organizations.

OPENING OF THE SESSION

2. Mr David Ardill, Secretary of the IOTC, welcomed the attendees to the session, and noted the large amount of work to be done in the short time available. He then invited the delegates, listed in Appendix A, to introduce themselves.

ELECTION OF OFFICERS

3. Seychelles proposed that Dr John Beddington, of the United Kingdom, chair the session. Japan and the European Community seconded the proposal, and Dr Beddington was duly elected. The European Community proposed Mr Veloson Christophe, of Madagascar, as Vice-Chairman, a motion seconded by Seychelles and supported by the Committee.

ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION (IOTC/SC/98/1)

4. The Scientific Committee adopted the Agenda as presented in Appendix B of this report. The documents available are listed in Appendix C.

ADMISSION OF OBSERVERS

5. In the interests of greater transparency in the activities of the Committee, representatives from States eligible for membership in IOTC (Comores, Russian Federation, Tanzania, United Arab Emirates) and international organizations which had previously attended meetings of the IOTC (CCAMLR, CCSBT, FAO, ICCAT, SEAFDEC) were admitted as observers.

REPORT OF THE 7TH EXPERT CONSULTATION ON INDIAN OCEAN TUNAS (IOTC/SC/98/2)

General recommendations to the Scientific Committee

6. The Chairman of the 7th Expert Consultation introduced the report. In view of the late distribution of the document and the consequent lack of time for review, it was agreed to go through the report by agenda item and note any substantive comments.

7. The summaries of the national reviews of fisheries in the report were adopted as presented. The Committee noted that there is a need to strengthen and improve data collection generally in the region. It discussed and endorsed the conclusions and research recommendations of the Expert Consultation (Appendix D) for the various stocks of tunas and other species covered by the report, with additional comments in some cases, listed below.

Bigeye

8. The Committee noted that there was a distinction between the purse-seine catch of bigeye tuna on fish aggregation devices (FADs), which consists mainly of juvenile fish, and the longline fishery, which catches mostly large fish, and that the implications of both fisheries needed to be recognized. The beneficial effects of the voluntary moratorium on fishing on FADs by the French and Spanish fleets in the Atlantic were described, and the similar moratorium recently imposed in part of the Indian Ocean noted. The session agreed that any controls on fishing for bigeye would ideally be implemented in co-ordination with other fisheries management organizations in other oceans, since

otherwise limiting the fishery in one ocean could lead to increased fishing pressure on the species in other areas.

9. Although the present knowledge of bigeye tuna was poor, there appeared to be cause for concern about the condition of the stock, particularly in view of the high level of effort and increased catches of juveniles in the fishery on FADs.

10. The Committee recommended that a first step would be to make a comprehensive list of all vessels of all gears catching bigeye, recognising the difficulties posed by small vessels in artisanal fisheries and flag-of-convenience vessels.

Albacore

11. The Committee noted that the Expert Consultation had concluded that the stock of albacore tuna appeared to have been recovering since the closure of the drift gillnet fishery in 1992, and had therefore made no research recommendations. However, studies in other oceans suggested that the abundance of the species might be more dependent on changes in large-scale environmental conditions than on changes in fishing strategies. It was noted that albacore tuna needed further study in the light of those studies, and that in future conclusions about the effect of changes in fishing practices should be examined more carefully.

Southern Bluefin Tuna

12. The Committee noted that projection results made by scientists of two of the three CCSBT members indicated a low probability of recovery under constant current catch scenarios, while those for the third suggest a relatively high probability.

13. Japan described the results of an experimental fishing programme for southern bluefin tuna to discriminate between alternative hypotheses about the distribution of the species. The results indicated the presence of this species in areas not currently exploited by the fishery. Australia expressed serious concern about the validity of these results. A fuller description of the Japanese and Australian comments is given in Appendix E of this report.

Billfish

14. The Committee noted in particular the high rates of predation by marine mammals on swordfish caught on longlines in the western Indian Ocean, which need further study.

15. Japan commented that the sharp decline in the longline CPUE of billfish in all oceans was in apparent contradiction to the long-term catches, which were close to the MSY, and that better methods than those currently used to calculate indices of abundance might be available. The Committee noted that artisanal fisheries catch significant amounts of billfishes and other tuna species (principally longtail tuna, kawakawa, frigate and bullet tunas), data are poor, and statistics should be improved.

Tagging

16. The Committee recognized the importance of tagging programmes for stock assessment, and agreed that any Working Party on tagging should be given specific terms of reference, including clear objectives and priorities for tagging programmes in line with the research requirements for the target stocks.

Other matters

17. The Committee endorsed the recommendation of the Expert Consultation that the Secretariat cooperate with other institutions in coordinating the collection of DNA samples for genetic studies of bigeye and yellowfin tuna.

18. The Committee also endorsed the recommendation that the Secretariat identify transhipment points for vessels flying flags of convenience in order to improve the collection of statistics for these

vessels, with the additional comment that the Secretariat approach the pertinent countries to report transhipments, and that transhipping data be accompanied by vessel identifiers in order to keep accurate track of catches and to avoid the possibility of double counting of catches.

19. The Committee recognized an increasing need to manage marine ecosystems rather than separate fish stocks. Therefore, the potential effects of changes in biomass of predators and prey species would need further studies.

INCIDENTAL CATCHES OF NON-TARGET, ASSOCIATED AND DEPENDENT SPECIES (IOTC/SC/98/3)

20. The Secretariat introduced document IOTC/SC/98/3, which outlines actions taken by FAO on the issue of non-target, associated and dependent species (NTADs). The Committee agreed to submit to the Commission the recommendation of the Expert Consultation that, in view of the increasing global concern about the incidental catches of NTADs, the Commission should consider re-interpreting its current mandate to include collection of data on catches of NTADs. Decisions on which NTADs should be studied would be taken once the recommendation was approved and a Working Party on Data Collection and Statistics established, and sufficient data had been collected to enable the species in greatest need of attention to be identified.

STAFFING OF THE SECRETARIAT

21. The Committee unanimously endorsed the recommendation of the Expert Consultation that the Commission should increase current staffing of the Secretariat to further improve its current capacity for statistics and coordinate proposed research. The Committee agreed to strongly recommend the hiring of (1) a data manager, who would allow the Deputy Secretary to concentrate more on stock assessment by taking over some of his current work, and (2) a data programmer. It was also agreed that it would be beneficial for both the Secretariat and research institutions in member States if scientists from such institutions could participate actively in the work of the Secretariat as visiting scientists at IOTC headquarters.

PARTICIPATION IN WORKING PARTIES

22. The Committee concurred with the view of the Expert Consultation that participation in the Working Parties should be open to interested and competent scientists in order to ensure the transparency of the scientific process, but recognized that there might be situations where this might be desirable, but not practical for logistic reasons.

23. Meetings of Working Parties may be held in Seychelles or elsewhere, but the costs of meetings hosted by a Member State outside Seychelles would be borne by the host State.

STATISTICAL REQUIREMENTS

Status of data submissions to the Secretariat (IOTC/SC/98/4)

24. The Secretariat introduced document IOTC/SC/98/4, which provides an overview of the status of the data held by IOTC, describes the work done by the Secretariat during the past year, and outlines its plans for the future. The Committee shared the Secretariat's concern over the decreasing trend in data reporting and the paucity of catch-and-effort and length-frequency data.

25. It was suggested that the Secretariat take an active role in identifying gaps in the data collection and develop an integrated monitoring programme, including port sampling and on-board observers, but it was noted that the funds necessary for such a programme were not available with the current budget. The development of a plan for such a programme should be considered a task for the Working Party on Data Collection and Statistics.

26. It was also suggested that the Secretariat could establish links with other regional organizations for data collection, and collect data via regional data collection centres.

27. The Committee endorsed the recommendation of the Expert Consultation that catch, effort, and size data should be made available routinely to IOTC at the finest possible time and area resolution for stock assessment purposes.

28. The Committee agreed to recommend the mandatory data reporting standards listed in Appendix F of this report, stressing that these were minimum standards, and that they should be further examined by a permanent Working Party on Data Collection and Statistics, as recommended by the Expert Consultation.

Confidentiality policy on data submissions (IOTC/SC/98/5)

29. The Secretariat introduced document IOTC/SC/98/5, which reviews the confidentiality policies of other international fisheries bodies and presents proposals on this issue for the IOTC. It was noted that the proposed rules apply to length-frequency data as well as catch-and-effort data.

30. The Committee endorsed the proposed data confidentiality policy and procedures, as presented in Appendix G.

ESTABLISHMENT OF WORKING PARTIES

31. The Committee endorsed the recommendation of the Expert Consultation to establish a permanent Working Party on Data Collection and Statistics, which would begin its work as soon as possible. To facilitate this, the Secretariat was asked to draft terms of reference for the Working Party, which would be circulated to members, and to organise any necessary intersessional work.

32. The Committee agreed that the Working Party on tropical tunas should be established, and that the agenda for its first meeting should include an item for the examination of terms of reference for a Working Party on tagging, not to plan its programme in detail, but to consider the objectives and requirements of a tagging programme.

33. The Committee noted that in order for the Working Party on tropical tunas to work effectively at its first meeting, a great deal of preparatory work would need to be done. It agreed that the most effective mode of operation for the Working Party would be for the member States to work in conjunction with the Secretariat, which would co-ordinate and facilitate the required tasks.

34. It was agreed that the Working Party should concentrate on one species at a time, and that bigeye tuna should be the first priority.

35. Two proposals were put forward for consideration by the Commission regarding the establishment of additional Working Parties. One proposal was that Working Parties should be established for neritic tunas, temperate tunas, and billfish in addition to those on data and tropical tunas, and such Parties would review information relevant to their work if and when presented. The other proposal was that the agenda of the next session of the Scientific Committee should include a review of information on neritic tunas, temperate tunas, and billfish, and that specific Working Parties should be established if necessary.

36. Japan and Seychelles wished to be associated with the first proposal, and Australia and the United Kingdom with the second.

AN EXAMINATION OF THE IMPLICATIONS OF CATCHES BY TAIWAN PROVINCE OF CHINA ON THE SCIENTIFIC ASSESSMENT OF TUNA STOCKS

37. Substantial catches of tuna are made by Taiwan Province of China in the Indian Ocean. There is a need to establish a mechanism by which scientific information on these fisheries can be collected by the IOTC and used in the proceedings of the Scientific Committee. Regarding the participation of scientists from Taiwan Province of China in the scientific work of the IOTC and providing scientific data, the Chinese delegation is conscious that IOTC should benefit fully from the knowledge and data available in the Province.

ELECTION OF OFFICERS FOR THE BIENNIUM

38. Thailand proposed Mr Renaud Pianet of France as Chairman, seconded by Japan, Madagascar, and India. Japan proposed Dr V.S. Somvanshi of India as Vice-Chairman, seconded by China, Australia, and Thailand. The attendees supported both nominations.

ADOPTION OF THE REPORT

39. The Committee adopted the report of the meeting for submission to the Commission.

Appendix A (Scientific Committee 's Report)
List Of Participants

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Appendix B (Scientific Committee Report)
Agenda

1. Opening of the Session
2. Election of Officers
3. Adoption of the Agenda and arrangements for the Session (IOTC/SC/98/1[E])
4. Admission of observers
5. Report of the Seventh Expert Consultation on Indian Ocean Tunas (IOTC/SC/98/2[E])
   - 5.1. General recommendations to the Scientific Committee
     - 5.1.1. Incidental catches of non-target species, associated and dependent species (IOTC/SC/98/3[E])
     - 5.1.2. Staffing of the Secretariat
     - 5.1.3. Participation in Working Parties
   - 5.2. Statistical requirements
     - 5.2.1. Status of data submissions to the Secretariat (IOTC/SC/98/4[E])
     - 5.2.2. Confidentiality policy on data submissions (IOTC/SC/98/5[E])
   - 5.3. Establishment of Working Parties
   - 5.4. An examination of the implications of catches by Taiwan Province of China on the scientific assessment of tuna stocks
6. Election of Officers for the biennium
7. Adoption of the Report

Appendix C (Scientific Committee Report)
List of Documents

1. IOTC/SC/98/1[E] Provisional Agenda
2. IOTC/SC/98/2[E] Report of the Seventh Expert Consultation on Indian Ocean Tunas
3. IOTC/SC/98/3[E] Incidental catches of non-target species, associated and dependent species
4. IOTC/SC/98/4[E] Status of the IOTC databases
5. IOTC/SC/98/5[E] Confidentiality policy on data submitted to IOTC

Appendix D (Scientific Committee Report)
Research Recommendations of the 7th Expert Consultation for Tuna and Tuna-like Species in the Indian Ocean

Yellowfin Tuna

The Consultation recommended that it was necessary to:

1. Develop and apply a comprehensive framework for assessing the status of the yellowfin resources in the Indian Ocean that can accommodate data from the diverse fisheries and account for the uncertainties in stock structure, yellowfin biology and alternative interpretations/ hypotheses for catch and effort data. A strategy is needed for providing the necessary resources for doing this and also for ensuring that there is sufficient review of the framework and its application.
2. Develop and implement appropriate, timely and verifiable data collection procedures for all fisheries harvesting yellowfin in the Indian Ocean. The data that need to be collected include catch, effort and size information with sufficient temporal and spatial resolution.
3. Estimate basic biological parameters for yellowfin tuna in the Indian Ocean including stock structure, movement/transfer rates between areas, growth rates, reproductive parameters and natural mortality rates. Estimates should include estimates of uncertainty and consideration of temporal and spatial variability.
4. Develop, implement and analyse the results of a large scale tagging programme covering the full range of yellowfin sizes and all areas where yellowfin tuna commonly occur.
5. Take into account the recent increases in efficiency of the fleets in the calculation of indices of abundance. Further research is necessary in this area.

Bigeye tuna

The Consultation recommended that:

1. The status of the stock should be more precisely determined and that a comprehensive stock assessment be urgently carried out to that effect.
2. A long-term collaborative research programme including more basic biological research, improvements in the data collection and tagging needs to be designed and implemented.

Skipjack tuna

The Consultation recommended that:

1. The status of the stock should be more precisely determined and that a comprehensive stock assessment be urgently carried out to that effect.
2. A long-term collaborative research programme involving more basic biological research, improvements in the data collection and possibly tagging needs to be designed and implemented.

Swordfish

The Consultation recommended that action be taken to:

1. Collect size information by sex,
2. Improve understanding of biology and ecology of swordfish, with a specific emphasis on encouraging collaboration with the proposed Programme of the *Commission de l'Océan Indien* (COI), recognising the importance of collaboration at regional or wider levels because of the wide distribution of this species,
3. Collect information reflecting targeting, including time of set, materials used for gear (monofilament, braided nylon, etc.), and use of light sticks,
4. Improve the database held by the IOTC and recuperate existing data,
5. Conduct a stock assessment with best available information and

6. Conduct a specific programme to address the question of predation of hooked fish by marine mammals, with a view to possible prevention.

Billfish

The Consultation recommended that:

1. Data collection be strengthened and improved, especially on obtaining accurate catches, as it was felt that catches were underreported due to discarding practices.
2. By-catch of billfish in the purse seine fishery be reported separately, although not considerable in quantity.
3. Available data be compiled and a stock assessment conducted with the best available data.
4. Sports fishery catch and effort data should be collected and reported to IOTC in a timely manner as developments in localised sports fisheries, which are known to have apparently high catch rates, were noted in many countries. At present catch statistics from these fisheries are not systematically reported to the IOTC.

Other Tuna Species

The most important species of other tunas in the Indian Ocean catches are longtail tuna (*Thunnus tonggol*), kawakawa (*Euthynnus affinis*), frigate tuna (*Auxis thazard*) and bullet tuna (*Auxis rochei*).

1. There continues to be a need for small tuna fishery statistics to be improved. All catches should be reported to IOTC by species, rather than by species groups. It is also necessary to collect information on the fishing effort associated to these catches.
2. There is need to consolidate the understanding of the biology of kawakawa and longtail tuna. In particular, age validation , reproduction and migration studies should be carried out.

Seerfish

The Consultation recommended that:

1. Collection of biological data should be improved and extended to all fishing areas.
2. Estimated growth rates of *Scomberomorus commerson*, in particular, be validated.
3. Catch-and-effort data collection be improved.
4. A study on gear selectivity be conducted.

Tagging

The Consultation recommended that:

1. There is no substitute to a conventional tagging programme for a better assessment of the resources, even if tagging with electronic devices is also recommended;
2. Other species must be tagged if opportunities arise;
3. A limited number of taggers should be involved to limit the biases due to individual variability;
4. Double tagging has to be carried out to estimate the tag shedding rate, and tag seeding experiments carried out when possible to estimate recovery rates;
5. For the validation of growth, the strontium-chlorine technique should be preferred to OTC tagging;
6. To be fully successful, a tagging programme requires substantial resources in the recovery procedures, which can represent large investment;
7. An awareness programme targeting all the fishermen and canneries active in the Indian Ocean must be launched before operations are started.

Appendix E (Scientific Committee Report)
Preliminary result of Experimental Fishing Program (EFP) of Southern Bluefin Tuna (SBT) conducted by Japan

Japan reported that, in order to obtain information about abundance index of SBT where historically fished by longline but not operated in recent years due to drastic reduction of TAC in conjunction with sequential increase in abundance for small- and medium-sized fish, Japan conducted the EFP of SBT using 65 commercial boats during mid-July to the end of August 1998 in the central Indian Ocean.

Total catch from this EFP amounted to 1,464 MT with a total of 2,547 sets.

The preliminary calculation by Japan concluded that average CPUE ratio between the past fishing ground vs. the current fishing ground provided by the EFP was about 0.76, which rejected the so-called “variable square method” hypothesis with zero CPUE in the past fishing ground.

Australian Comment

As Australia and New Zealand have repeatedly informed Japan, there are many scientific, technical and methodological flaws in Japan’s EFP including:

- There is no point in testing whether the constant squares or variable squares hypotheses are “true” or “false”, since both are merely extremes of a continuum of possible hypotheses. ***By definition, neither is true or false*.** Their purpose in stock assessment derives from combining them (usually together with other intermediate hypotheses) in weighted combinations to approximate the “observed truth”.
- Therefore, it is scientifically meaningless for Japan to claim that because Japan’s EFP has found SBT in certain “unfished” areas, the variable squares hypothesis may be rejected. Since SBT are highly migratory, it would be most improbable not to catch fish in those areas.
- Because the EFP fishing was not "blind" and was without safeguards to keep boats from communicating results, the fishermen could readily influence their overall results, for example by concentrating on hot spots within the target areas. In the absence of stringent controls and external verification of fishing practices in the EFP, analysis of the EFP is open to serious doubt.
- Instead of being designed for research, Japan’s EFP was designed for the kind of "exploratory fishing" used in the past for exploring ***virgin stocks***. This makes no sense for a stock that has a long history of exploitation, with serious scientific concerns about continuing low and declining levels of recruitment and spawning stock biomass.
- Japan proposed inadequate validation and verification of EFP data and to provide the data to Australia and New Zealand in an aggregated form only. This results in a lack of transparency in the validity (or otherwise) of the results for and interpretation of the EFP.
- Japan’s EFP includes a decision rule on how the EFP analysis should affect SBT stock status assessments which is unscientific and biased in favour of inferring an improvement in the stock status.
- Japan’s EFP assessment methodology also leads to a scientifically unjustified decision rule on whether the catch of an additional 1,464 tonnes of SBT is itself harmful to stock rebuilding objectives.

Additional Comment by Japan

As Japan repeatedly informed Australia and New Zealand, their views on Japan’s EFP are heavily biased in many common scientific understanding, and further informed Japan’s EFP would be expected to eliminate about 66% of the gap between the estimates of the Japanese scientists and Australia’s and New Zealand’s;

- It is obvious usage of variable squares hypothesis which would lead to the depletion of stocks in many scenarios has been denied by the result of the EFP. Scientists no longer need any subjective guesswork weighting method because true values were obtained.
- Design of the EFP made by Japan has been improved several times through internationally acknowledged experts from several countries enriched with fishery management experience, international fisheries management organizations and FAO. Therefore the EFP had been recognized as valid, highly upgraded and transparent programme.
- Although Japan earnestly invited to join the implementation of the programme by appropriate ways including placing scientific observers, Australia and New Zealand refused to join the EFP in any form proposed by Japan. Therefore, their claim on detailed data and lack of transparency were totally irrelevant, and the EFP was conducted by placing the U.S. observers aboard.
- Significant improvements in the scientific approach taken by Australia and New Zealand to project by VPA modelling many insoluble uncertainties by practical means have been suggested by external invited scientists.

With the preliminary projection with new CPUE weighting obtained by the EFP, Japan's preliminary result for recovery rate of parental biomass of 1980 level by 2020 would be over 80% (of three nation's average) which was far improved from the very much lower projections of Australia and New Zealand as reported in the CCSBT Scientific Committee Report in 1998. Japan is pleased to provide the copy of the EFP to any scientists and members of IOTC. Japan has already provided the EFP programme for Expert Consultation.

Appendix F (Scientific Committee Report)
Mandatory statistical requirements for IOTC members

Catch and effort data

a) **Surface fisheries**: catch and effort data of the surface fisheries, catch weight and fishing days at least (purse seine, baitboat, troll, drift nets) should be provided to the IOTC by 1° grid area and month strata. Purse seine fishery data should be stratified by type of school. Those data should preferably be extrapolated to the national monthly catches of each gear. The raising factors used, corresponding to the logbook coverage, should be given routinely to the IOTC.

b) **Longline fisheries**: catch and effort data of the longline fisheries should be provided to the IOTC by 5° grid area and month strata, preferably in numbers and in weight. The fishing effort should be given in numbers of hooks. Those data should preferably be extrapolated to the national monthly catches. The raising factors used, corresponding to the logbook coverage, should be given routinely to the IOTC.

c) The catches, efforts and sizes of the **artisanal, small scale and sport fisheries** should also be submitted on a monthly basis, but using the best geographical areas used to collect and process those data.

Size data

Considering that size data are of key importance for most tuna stock assessment, length data should be routinely submitted to the IOTC on a 5° grid area and month basis, by gear and fishing mode (e.g. free/log schools for the purse seiners). Size data should be provided for all gears and for all species covered by the IOTC. Size data sampling should preferably be run under strict and well described random sampling schemes which are necessary to provide unbiased figures of the sizes taken. The exact recommended level of sampling could vary between species (as a function of various parameters), but the specific level of recommended sampling needs to be established by the working party on statistics. More detailed size data, for instance size by individual samples, should also be made available to the IOTC when requested by specific working groups, but under strict rules of confidentiality.

Timeliness of data submission to the IOTC

It is essential that all the fishery data be available in due time to allow the monitoring of stocks and analysis of the data. It is thus recommended that the following rules should be applied as standard obligation:

a) **Surface fleets and other fleets operating in coastal zone** must provide their fishery data at the earliest possible date but **no later than the 30th of June each year** (previous year data).

b) **Longline fleets operating in the high seas** must provide the **provisional** fishery data at the earliest date, but **no later than before June 30th** (for the previous year data). They must provide the **final estimate** of their fishery data **before December 30th each year** (for the previous year data).

The delays presently required to submit statistics could be reduced in the future because of the development of communication and data processing technologies, which should reduce the present data processing delays.

Appendix G (Scientific Committee Report)
Proposed Data Confidentiality Policy and Procedures

Recognizing the need for confidentiality at the commercial and organisational levels for data submitted to IOTC in the context of stock assessment working parties, the following policy and procedures are suggested :

Confidentiality of data

The policy for releasing catch and effort data will be as follows:

- Catch and effort data grouped by 5° longitude by 5° latitude by month for longline and 1° longitude by 1° latitude by month for surface fisheries stratified by fishing nation are considered to be in the public domain, provided that the catch of no individual vessel can be identified within a time/area stratum. If this is the case, the data will be aggregated by time, area or flag to preclude such identification.
- Catch and effort data grouped at a finer level of time-area stratification will only be released with written authorisation from the sources of the data. Each data submission will require the specific permission of the Secretary.
    - The person requesting the data is required to provide a description of the research project, including the objectives, methodology and intentions for publication. Prior to publication, the manuscript should be cleared by the Secretary. The data are released only for use in the specified research project and the data must be destroyed upon completion of the research project. However, with authorisation from the sources of the data, catch and effort data may be released for long-term usage for research purposes, such that the data need not be destroyed.
    - The identity of individual vessels will be hidden in fine level data unless the individual requesting this information can justify its necessity.
    - The person requesting the data will be asked to provide a report of the results of the research project to IOTC for subsequent forwarding to the sources of the data.

Procedures for the safeguard of records

Procedures for safeguard of records and databases will be as follow:

- Access to logbook-level information will be restricted to IOTC staff requiring these records for their official duties. Each staff member having access to these records will be required to sign an attestation recognising the restrictions on the use and disclosure of the information. In virtue of the value of the data, those responsible for unauthorized disclosure of this information will be liable to criminal prosecution.
- Logbook records will be kept locked, under the specific responsibility of the Data Manager. These sheets will only be released to authorized IOTC personnel for the purpose of data input, editing or verification. Copies of these records will be authorized only for legitimate purposes and will be subjected to the same restrictions on access and storage as the originals.
- Databases will be encrypted to preclude access by unauthorized persons. Full access to the database will be restricted to the Data Manager and to senior IOTC staff requiring access to these data for official purposes, under the authority of the Secretary. Staff entrusted with data input, editing and verification will be provided with access to those functions and data sets required for their work.

APPENDIX H
MANDATORY STATISTICAL REQUIREMENTS FOR IOTC MEMBERS

CATCH AND EFFORT DATA

a) **Surface fisheries**: catch and effort data of the surface fisheries, catch weight and fishing days at least (purse seine, baitboat, troll, drift nets) should be provided to the IOTC by 1° grid area and month strata. Purse seine fishery data should be stratified by type of school. Those data should preferably be extrapolated to the national monthly catches of each gear. The raising factors used, corresponding to the logbook coverage, should be given routinely to the IOTC.

b) **Longline fisheries**: catch and effort data of the longline fisheries should be provided to the IOTC by 5° grid area and month strata, preferably in numbers and in weight. The fishing effort should be given in numbers of hooks. Those data should preferably be extrapolated to the national monthly catches. The raising factors used, corresponding to the logbook coverage, should be given routinely to the IOTC.

c) The catches, efforts and sizes of the **artisanal, small scale and sport fisheries** should also be submitted on a monthly basis, but using the best geographical areas used to collect and process those data.

SIZE DATA

Considering that size data are of key importance for most tuna stock assessment, length data should be routinely submitted to the IOTC on a 5° grid area and month basis, by gear and fishing mode (e.g. free/log schools for the purse seiners). Size data should be provided for all gears and for all species covered by the IOTC. Size data sampling should preferably be run under strict and well described random sampling schemes which are necessary to provide unbiased figures of the sizes taken. The exact recommended level of sampling could vary between species (as a function of various parameters), but the specific level of recommended sampling needs to be established by the working party on statistics. More detailed size data, for instance size by individual samples, should also be made available to the IOTC when requested by specific working groups, but under strict rules of confidentiality.

TIMELINESS OF DATA SUBMISSION TO THE IOTC

It is essential that all the fishery data be available in due time to allow the monitoring of stocks and analysis of the data. It is thus recommended that the following rules should be applied as standard obligation:

a) **Surface fleets and other fleets operating in coastal zone** must provide their fishery data at the earliest possible date but **no later than the 30th of June each year** (previous year data).

b) **Longline fleets operating in the high seas** must provide the **provisional** fishery data at the earliest date, but **no later than before June 30th** (for the previous year data). They must provide the **final estimate** of their fishery data **before December 30th each year** (for the previous year data).

The delays presently required to submit statistics could be reduced in the future because of the development of communication and data processing technologies, which should reduce the present data processing delays.

APPENDIX I
DATA CONFIDENTIALITY POLICY AND PROCEDURES

Recognizing the need for confidentiality at the commercial and organisational levels for data submitted to IOTC, the following policy and procedures on confidentiality of data will apply:

DATA SUBMITTED TO THE SECRETARIAT

The policy for releasing catch-and-effort and length-frequency data will be as follows:

- Catch-and-effort and length-frequency data grouped by 5° longitude by 5° latitude by month for longline and 1° longitude by 1° latitude by month for surface fisheries stratified by fishing nation are considered to be in the public domain, provided that the catch of no individual vessel can be identified within a time/area stratum. In cases when an individual vessel can be identified, the data will be aggregated by time, area or flag to preclude such identification, and will then be in the public domain.
- Catch-and-effort and length-frequency data grouped at a finer level of time-area stratification will only be released with written authorisation from the sources of the data. Each data release will require the specific permission of the Secretary.

  a) A Working Party will specify the reasons for which the data are required.

  b) Individuals requesting the data are required to provide a description of the research project, including the objectives, methodology and intentions for publication. Prior to publication, the manuscript should be cleared by the Secretary. The data are released only for use in the specified research project and the data must be destroyed upon completion of the project. However, with authorisation from the sources of the data, catch-and-effort and length-frequency data may be released for long-term usage for research purposes, and in such cases the data need not be destroyed.

  c) The identity of individual vessels will be hidden in fine-level data unless the individual requesting this information can justify its necessity.

  d) Both Working Parties and individuals requesting data shall provide a report of the results of the research project to IOTC for subsequent forwarding to the sources of the data.

PROCEDURES FOR THE SAFEGUARD OF RECORDS

Procedures for safeguarding records and databases will be as follows:

- Access to logbook-level information will be restricted to IOTC staff requiring these records for their official duties. Each staff member having access to these records will be required to sign an attestation recognising the restrictions on the use and disclosure of the information.
- Logbook records will be kept locked, under the specific responsibility of the Data Manager. These sheets will only be released to authorised IOTC personnel for the purpose of data input, editing or verification. Copies of these records will be authorised only for legitimate purposes and will be subjected to the same restrictions on access and storage as the originals.
- Databases will be encrypted to preclude access by unauthorised persons. Full access to the database will be restricted to the Data Manager and to senior IOTC staff requiring access to these data for official purposes, under the authority of the Secretary. Staff entrusted with data input, editing and verification will be provided with access to those functions and data sets required for their work.

DATA SUBMITTED TO WORKING PARTIES

- Data submitted to Working Parties will be retained by the Secretariat or made available for other analyses only with the permission of the source.
- The above rules of confidentiality will apply to all members of Working Parties.

APPENDIX J
RESOLUTION ON SOUTHERN BLUEFIN TUNA

The Indian Ocean Tuna Commission (IOTC),

Mindful that southern bluefin tuna (SBT) is a highly migratory species whose range includes, but extends beyond, the Indian Ocean,

Recalling the competence of the IOTC, under the Agreement for the Establishment of the Indian Ocean Tuna Commission (the Agreement), for tunas in the Indian Ocean, including SBT most of whose range falls within the IOTC area of competence,

Recalling also that the objective of the Convention for the Conservation of Southern Bluefin Tuna (the Convention) is to ensure, through appropriate management, the conservation and optimum utilization of SBT throughout its entire range,

Further recalling Article XV of the Agreement and Article 12 of the Convention, each of which provides for cooperation between the IOTC or the Commission for the Conservation of Southern Bluefin Tuna (the CCSBT) respectively, and other relevant international organizations, while also seeking to avoid duplication with respect to their work,

Bearing in mind that the recognition by the IOTC of the prime responsibility of CCSBT for conservation and management of SBT, recorded at paragraph 31 of the Report of the First Special Session of the IOTC, was taken at a time when a total allowable catch (TAC) for SBT was in force under the Convention,

Concerned at the difficulties between CCSBT member States, due mainly to differences on SBT stock status assessments and projections, as reported to the IOTC by its Scientific Committee in the Report of its First Session, which are currently preventing the CCSBT from agreeing to a TAC,

Calls upon the CCSBT member States urgently to overcome their difficulties in order to achieve the objective of the Convention and, to this end, offers to them the good offices of the IOTC Chairman, the Chairman of the Scientific Committee and the Secretary, or their nominees, who may invite the contribution of other experts if appropriate, to advise on means to achieve this objective.

Agrees to review, at its fourth session, the progress made in overcoming those difficulties, and, if necessary, to decide whether a Working Party on SBT or on temperate tunas should be established to advance the effective conservation and optimum utilization of SBT.

APPENDIX K
DRAFT RESOLUTION ON THE MANAGEMENT OF FISHING CAPACITY OF LONG DISTANCE TUNA LONG-LINE VESSELS

For Future Consideration

The Indian Ocean Tuna Commission (IOTC);

Concerned that the fishing fleet capacity for long distance tuna longline vessels continues to increase rapidly and the current capacity exceeds the levels of fishing effort appropriate for sustainable use of the high value tuna resources of the Indian Ocean,

Further concerned that, for example, the standardized CPUE for bigeye tuna in tropical area of the Indian Ocean has shown a continual decrease in the last decade, as reported by the 7th Expert Consultation,

Noting that the Code of Conduct for Responsible Fisheries of the FAO provides that States should take measures to prevent or eliminate excessive fishing capacity,

Recalling that at its last session in 1997, the Committee on Fisheries, requested the FAO to address the issue of fishing capacity,

Appreciating FAO having organized a Technical Working Group on the Management of Fishing Capacity in La Jolla, U.S.A. from 15 to 18 April 1998 and that a subsequent FAO Consultation was held from 26 to 30 October 1998, preceded by a preparatory meeting from 22 to 24 July 1998,

Recognizing the FAO Consultation adopted for consideration by the Committee on Fisheries early in 1999 a Guideline/Plan of Action to call for immediate action for major international fisheries requiring urgent measures to reduce fishing capacity, including by long distance tuna longline fleets, among others,

1. Welcomes Japan's decision to immediately implement the Guideline/Plan of Action by a reduction in the number of long distance tuna longline vessels by 20% (namely, 130 vessels within 1998 Japanese fiscal year ending on 31 March 1999.)
2. Stresses the importance of corresponding actions by other IOTC Member and non-Member States and other fishing entities having a substantial number of long distance vessels operating in the Indian Ocean.
3. Seeks concerted action to substantially reduce the fishing capacity of the leading Asian long distance tuna longline fleets in those States and fishing entities to achieve sustainability of tuna stocks in the Indian Ocean.
4. Agrees to take all relevant measures to prevent or eliminate the operation of flag of convenience vessels in the Indian Ocean.

APPENDIX L
RECOMMENDATION CONCERNING REGISTRATION AND EXCHANGE OF INFORMATION ON VESSELS, INCLUDING FLAG OF CONVENIENCE VESSELS, FISHING FOR TROPICAL TUNAS IN THE IOTC AREA OF COMPETENCE

The Indian Ocean Tuna Commission (IOTC);

Noting the Research Recommendations of the 7th Expert Consultations on Indian Ocean Tunas regarding the need to collect data on fishing effort;

Noting the Report of the First Session of the Scientific Committee and its general recommendation on the need to make a comprehensive list of all vessels of all gears catching bigeye;

Recommends, in accordance with the provisions of Article IX, paragraph 8, of the Agreement establishing the IOTC, that:

1. All Contracting Parties and Non-Contracting Parties cooperating with the IOTC with vessels fishing for tropical tunas in the IOTC Area of Competence (hereinafter referred to as 'the Area'), by 30 June every year:
   - shall submit to the Secretary a list of their respective vessels greater than 24 m LOA that have fished for tropical tunas in the Area during the previous year;
   - may submit to the Secretary, on a voluntary basis, a list of their respective vessels of less than 24 m LOA that have fished for tropical tunas in the Area during the previous year.
2. These lists shall contain the following information for each vessel:
   - Name and registration number;
   - Previous flag (if any);
   - International radio call sign;
   - Vessel type, length, and gross registered tonnage or gross tonnage;
   - Name and address of owner, and/or charterer, and/or operator.
3. Contracting Parties which issue licences to foreign flag vessels to fish for tropical tunas in the Area shall submit to the Secretary the same information on all vessels to which such licences have been issued, according to the same timetable.
4. The Secretary shall circulate this information annually, or upon request, to all Contracting Parties and Non-Contracting Parties cooperating with the IOTC.
5. The Contracting Parties and Non-Contracting Parties cooperating with the IOTC shall notify the Secretary of any information concerning fishing vessels not covered in paragraph 1 but known or presumed to be fishing for tropical tunas in the Area.
6. a) The Secretary shall request the flag State of a vessel covered in paragraph 5 to take the measures necessary to prevent the vessel from fishing for tropical tunas in the Area.
   b) The Secretary shall compile for future consideration by the Commission information on vessels covered in paragraph 5 whose flag is not identified.

APPENDIX M
RESOLUTION ON COOPERATION WITH NON-CONTRACTING PARTIES

The Indian Ocean Tuna Commission (IOTC);

Recognizing that the international community has an important responsibility to conserve the tuna and tuna-like resources of the Indian Ocean for present and future generations;

Recognizing that the problem of ensuring such sustainability cannot be resolved properly unless all nations fishing these species work together cooperating through the Commission;

Recalling that the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks has emphasized the importance of ensuring the conservation of highly migratory species through international fisheries organizations such as the Commission;

Therefore decides to:

1) Instruct the Chairman of IOTC to send the attached letter to all non-Contracting Parties known to have vessels fishing in the Area for species covered by the Agreement to urge them to become Contracting Parties.

2) Instruct the Secretary to provide to non-Contracting Parties referred to in paragraph 1 above copies of all relevant Resolutions adopted by IOTC at its Third Session.

DRAFT LETTER

(Courtesy formula)

The Indian Ocean Tuna Commission (IOTC) is a regional fisheries organization, created in 1996, which to date includes 16 States and one Organization for regional economic integration.

The principal objective of the IOTC is to promote the conservation and management of the migratory species covered by the Agreement establishing the IOTC (hereinafter referred to as 'the Agreement').

The contracting parties of the IOTC have decided to cooperate among themselves to implement this objective.

In order to achieve this goal, the IOTC has, *inter alia*, the responsibility of constantly monitoring the status of and changes in the stocks covered by the Agreement and to collect, analyse and disseminate scientific information, statistics of catches and fishing effort and other data useful for the conservation and management of these stocks.

This function can be implemented only if non-Contracting Parties of the IOTC cooperate with the Commission and exchange information on fishing activities relating to the stocks covered by the Agreement.

The Chairman of the IOTC draws the attention of the Authorities of …… whose vessels exploit the stocks covered by the Agreement in its area of competence, to the need to cooperate for the purposes of conservation and management of these stocks.

With this need in mind, the Chairman of the Commission invites the Authorities of ……..... to become party to the Agreement establishing the IOTC by sending to the Director-General of FAO an instrument of acceptance, or at least to cooperate with the Commission, through the exchange of information and statistical data on fishing activities on the stocks falling within the remit of the Commission.

(Courtesy formula)

APPENDIX N
APPROVED BUDGET FOR 1999 AND SCALE OF CONTRIBUTIONS

TABLE 1. BUDGET FOR 1999

	TOTAL		1999	
	w/m	US$	w/m	US$
STAFF				
International				
Secretary - P-5	24	363,948	12	179,587
Deputy Secretary - P-4	24	345,099	12	170,286
Data Manager - P-3	18	244,254	6	80,000
Programmer - P-3	18	244,254	6	80,000
Consultants	5	75,000	2	30,000
Sub-total	89	1,272,554	38	539,872
Admin. support		0		
Administrative Asst. - G-6	24	63,270	12	31,220
Systems analyst/programmer	24	0	12	0
Bilingual secretary - G-4	24	38,690	12	19,091
Statistical clerk - G-5	24	55,367	12	27,321
Driver/Messenger - G-2	24	40,322	12	19,896
Messenger/Cleaner - G-1	24	31,211	12	15,401
Duty travel		100,000		50,000
Component total	233	1,601,413	110	702,801
Sampling		10,000		0
Meetings		80,000		30,000
Interpretation, translation & editing		145,000		70,000
Equipment		40,000		25,000
Operating expenses		60,000		30,000
Miscellaneous		20,000		10,000
SUB-TOTAL	233	1,956,413		867,801
Deductions (staff housing)		-48,000		-24,000
TOTAL		1,908,413		843,801
FAO Servicing Costs		85,879		37,971
GRAND TOTAL		1,994,292		881,772

TABLE 2 - SCALE OF CONTRIBUTIONS FOR 1999 (IN US$)

Member	Total contribution
Australia	67,454
China	30,195
European Community	271,760
Eritrea	5,187
France	55,574
India	31,490
Japan	114,509
Korea, Republic of	79,189
Madagascar	13,875
Malaysia	26,065
Mauritius	25,697
Pakistan	17,940
Seychelles	24,620
Sudan	5,187
Sri Lanka	22,065
Thailand	35,392
United Kingdom	55,574
Grand Total	**881,772**

APPENDIX O
CORRECTIONS TO THE FRENCH TEXT OF THE AGREEMENT FOR THE ESTABLISHMENT OF THE INDIAN OCEAN TUNA COMMISSION

Throughout, the word "Région", when referring to the Region covered by the Agreement, is written with a capital "R", "membre associé", when referring to associate members of FAO, is written with a small "m" and a small "a", as in the FAO Constitution, and "article" is written with a small "a".

PREAMBLE:

Paragraph 1: "efficiente" replaces "efficace"

Paragraph 6: "les" replaces "d", before "autres Etats"

Paragraph 7: "Organisation thonière de l'océan Indien occidental" replaces "Organisation thonière de la région ouest de l'océan Indien".

ARTICLE I:

"le présent accord" replaces "les présentes"

ARTICLE V:

Paragraph 1: "…couverts par le présent Accord et favoriser le développement durable des pêcheries basées sur ces stocks."

Paragraph 2, sub-paragraph a): "d'effort" instead of "de l'effort"

ARTICLE VII, *PARAGRAPH 2*:

"et sous réserve de" instead of "avec réserve de"

"en ce qui concerne l'octroi du statut d'observateur à des Etats" instead of "relativement à l'octroi du statut d'observateur des Etats"

ARTICLE XI, *PARAGRAPH 2*:

"Chaque membre de la Commission fournit à la Commission [le] une copie du texte ou, le cas échéant, un résumé, des lois…" [1]

ARTICLE XII, *PARAGRAPH 4, SUB-PARAGRAPH E):*

"[recommander] proposer aux membres de la Commission des [actions] recommandations appropriées,…"

ARTICLE XIII, *PARAGRAPH 3, SUB-PARAGRAPH B):*

"…prendre dûment en considération l'assignation à chaque membre d'une cotisation de base [fixe] égale pour tous et …"

ARTICLE XX, *PARAGRAPH 2:*

"Des propositions d'amendement peuvent être présentées par [les] tout membre[s] de la Commission ou par le Directeur général. [les premières] les propositions faites par un membre de la Commission doivent être adressées à la fois au Président de la Commission et au Directeur général et [les secondes] celles qui sont faites par le Directeur général doivent être adressées au Président de la Commission…"

[1] Words between brackets are deleted and words underlined are added.