PREPARATORY CONFERENCE FOR THE COMMISSION FOR THE CONSERVATION AND MANAGEMENT OF HIGHLY MIGRATORY FISH STOCKS IN THE WESTERN AND CENTRAL PACIFIC
Fifth session
Rarotonga, Cook Islands
29 September – 3 October 2003

WCPFC/PrepCon/32
3 October 2003

WORKING GROUP II: SCIENTIFIC STRUCTURE AND PROVISION OF INTERIM SCIENTIFIC ADVICE

Summary report by the Chairman of the Working Group

1. WG.II met in accordance with the terms of reference agreed at PrepCon I (WCPFC/PrepCon/4). The meeting was chaired by Dr John Kalish.

2. The agreed agenda is attached as Annex I. Not all matters were addressed and the order of some items was changed. Matters considered by WG.II included:

(a) Consideration of the structure for the scientific functions of the Commission;

(b) Special requirements of developing States and territories with respect to data requirements and technical capacities (WCPFC/PrepCon/WP.15/Add.1);

(c) Research priorities, research planning and coordination — Specifically: Proposal for monitoring the catches of highly migratory species in the Philippines and the Pacific Ocean waters of Indonesia;

(d) Consideration of the report of SCG 2 (WCPFC/PrepCon/28), including summary statements on the status of stocks; and

(e) The role of existing regional organizations in obtaining the best available scientific and other fisheries-related information.

3. A list of the working documents referred to by WG.II is attached as Annex II.

4. WG.II did not discuss the provision of science in relation to northern stocks as related to activities of the Northern Committee. This issue should be considered at PrepCon VI.

Structure for the scientific functions of the Commission for the transitional period (Agenda item 3)

5. WG.II produced an agreed science structure schematic and associated text describing how the structure will function during the transitional period of the Commission (Annex III). It was noted that during this period the structure and functions of the Secretariat must be flexible and adaptable in order to meet changing needs.

6. WG.II recommended that an independent review of the transitional structure and function should be carried out two years after entry into force of the convention, or earlier if required, to determine the effectiveness of the science structure and recommend changes as appropriate.

7. The agreed structure for the Secretariat calls for employment of one Science Manager, one Data Manager and one Science/MSC Observer Coordinator .

Special requirements of developing States and territories with respect to data requirements and technical capabilities (Agenda item 4)

8. WG.II considered the report *Capacity of Pacific Island Countries and Territories to meet the likely data requirements of the Western and Central Pacific Fisheries Commission* (WCPFC/PrepCon/WP.15/Add.1).

9. Based on the contents of the above report, WG.II noted the following view of Forum Fishery Agency members:

(a) The Commission requirements for data should recognise the existing patterns of strengths and weaknesses in FFA member capacities. FFA members have well-developed programmes for collecting and providing fisheries data but their analytical capacities are not yet well-developed. This means that in the earlier years of the Commission at least, data standards of the Commission should require the provision of data in an unprocessed form, whilst maintaining high quality data standards.

(b) Existing arrangements for the provision of data and science services should continue for the medium term at least, because of the continuing role the Oceanic Fisheries Programme, SPC has in monitoring tuna fisheries in the region. This is particularly important during the short term whilst capacity is being built up in the developing states and territories.

10. To address this issue in the longer term, WG.II recommended that the PrepCon should include in its report to the Commission:

(a) The development of a long term strategy for building fisheries data collection and analytical capacity in developing states and territories ;

(b) The development within the Commission science and data programmes of the capacity to provide advice and assistance to FFA members in respect of data and other technical areas; and

(c) The establishment of a broader process of consultation and a programme of cooperation to build FFA member capabilities in areas related to the Convention, including data and other technical aspects.

Research priorities, research planning and coordination — specifically: proposal for monitoring the catches of highly migratory species in the Philippines and the Pacific Ocean waters of Indonesia (Agenda item 8)

11. WG.II received a proposal from the SCG for characterising the catches of highly migratory species in the Philippines and the Pacific Ocean waters of Indonesia (Annex IV).

12. WG.II confirmed the importance of obtaining catch data from Indonesia and Philippines as highlighted in SCG 2 report (WCPFC/PrepCon/28) and recommended that , in cooperation with Indonesia and the Philippines, the proposal be further developed , and as a high priority that participants in the PrepCon further consider how they might assist this initiative, through services or financial support.

Consideration of the report of SCG 2 (WCPFC/PrepCon/28), including summary statements on the status of stocks (Agenda item 5)

13. WG.II considered the report of SCG 2 and with respect to stock status and other matters agreed the following summaries.

Skipjack tuna

14. Continued catches at the 1.2 million mt level are sustainable if high recruitment levels (principally determined by environmental factors) continue. However, any increases in purse-seine catches of skipjack may result in a corresponding increase in catches of yellowfin and bigeye tunas which recent stock assessments advise caution against – refer to discussions under Interactions section below.

Yellowfin tuna

15. While spatial patterns of exploitation remain uncertain, it appears some areas in the equatorial regions may be over-fished, and in these areas management actions may be required. While recognizing continuing uncertainties with the current yellowfin stock assessment, WG.II recommends that to reduce the risk of the yellowfin stock becoming over-fished further increases in fishing mortality (particularly on juvenile yellowfin) in the WCPO should be avoided.

Bigeye tuna

16. Overall the long line fishery has had the largest impact on the bigeye stock. Significant impacts also stem from the purse seine fishery, and increases in the Philippine and Indonesian fisheries. In 2002, SCG 1 noted that any increases in fishing mortality on juvenile bigeye "are likely to move the stock to an overfished state." The 2003 stock assessment suggests that current fishing mortality on juveniles and adults is not sustainable. SCG 2 recognized that uncertainty surrounding the 2003 assessment means that the true status of bigeye stocks may be overestimated or underestimated. However, given the possible worsening status of the bigeye stock, WG.II recommends that the concept of the precautionary approach should be applied. The most practical immediate management recommendation in support of this approach would be to ensure there is no increase in fishing mortality on bigeye. If future stock assessments confirm the 2003 assessment results, managers would need to implement practical management actions to decrease fishing mortality to prevent further decline in the stock.

South Pacific albacore

17. Current catch levels from the South Pacific albacore stock appear to be sustainable. However, there is evidence of localized depletion of albacore and this is a potentially important issue, particularly for small island developing states dependant on these resources.

Interactions

18. Stock assessments, including those conducted for the SCTB, are typically done in the context of the impact of fishing on the target stock with the potential impacts on other catch components considered qualitatively. WG.II noted that for at least two gear types, long line and purse seine setting on floating objects (FADs and logs), there is a potential for considerable

impacts on non-target species even if the target stock is not being adversely affected. Of particular concern at this time is the bycatch of bigeye tuna in the purse seine fishery for skipjack and yellowfin. There is scope to further increase catches of skipjack and hence fishing mortality, but this may have negative consequences for the status of the bigeye and yellowfin tuna stocks.

19. WG.II agreed that any increase in purse seine fishing on floating objects would increase the fishing mortality on both bigeye and yellowfin tunas in the WCPO. In addition, there is a substantial impact of the domestic fisheries of Indonesia and the Philippines on yellowfin. In the case of bigeye, the model indicated that the biggest impacts (where impact is defined as the extent by which the biomass is estimated to be reduced from unexploited levels due to fishing) are due to long line (target) fishing. The multi-species nature of the purse seine and long line fishery means that the impacts of fishing on stock status cannot be simply addressed by reference to the target species without addressing the other species caught. WG.II considered that if the assessment results for bigeye, and to a lesser extent yellowfin, are confirmed, the PrepCon will need to consider how to implement management measures to address over-fishing and alleviate over-fished stock conditions. Similar issues have faced other tuna Commissions and the approaches they have taken may serve as a starting point for PrepCon's considerations as appropriate.

Data needs

20. WG.II recognized that accurate stock assessment depends on accurate data collected at an operational level i.e. long line and purse-seine sets, and pole and line and troll by day fished. Such data are a long-term data requirement of the Commission. WG.II therefore recommended that operational level data be collected by all fleets and be made available to the Commission for stock assessment and other scientific analyses, with appropriate arrangements for data security and confidentiality.

21. Estimates of annual catches are an essential element of fisheries data. WG.II recommends that annual catches by species, gear and fleet in the Convention area be reported by flag states and coastal states.

22. Size composition (length and/or weight frequency) data are also essential for stock assessment. WG.II recommends that size composition data should be collected, at the operational level (described above) where practical, according to a statistically sound sampling design to ensure that the data are representative of the fishery.

23. Collection and management of operational level data raises questions of data confidentiality and security. WG.II recommends that PrepCon establish an ad hoc task group, composed of the Chairs of WGI, WG.II, WG.III and the SCG, and other experts to identify types of data that must be treated as confidential and to develop draft rules and procedures to govern the security and confidentiality of scientific data and other information collected and held by the future Commission. This task group should conduct its work intersessionally with the assistance of the Interim Secretariat, and primarily by electronic means. The task group should draw upon WCPFC/PrepCon/WP.16 and the rules, procedures, and standards adopted and developed by other regional fisheries management organizations and arrangements.

24. WG.II recognized the unique characteristics of the WCPO fisheries, that the pathways for data communication may be complex, and that coastal states play a critical role in regional data collection. WG.II recommends flexibility be maintained in establishing data reporting

requirements for the Commission and that coastal states and flag states cooperate in ensuring that the Commission receive data in a timely fashion.

25. Based on WCPFC/PrepCon/WP.16, WG.II recommends that the PrepCon take account of the unique characteristics of the region and utilize the data management services of the OFP during the transitional period (i.e. the period between the Convention coming into force and a fully functioning Commission). WG.II recommends an assessment of the costs and benefits of utilizing the capabilities of OFP for providing the data management functions of the Commission during the transitional period, and in the long-term.

26. WG.II noted that SCG 2 only briefly addressed the issue of data verification. More work on this issue needs to be carried out by SCG and the SCG should consider the contents of Article 6 of Annex I of the UNFSA.

Data gaps

27. WG.II noted the following data gaps identified by SCG 2 and recommended that efforts be made to reduce the extent of these gaps (refer also to paragraphs 11 and 12).

(a) Catch, effort and size composition data from Indonesia and Philippines domestic fisheries;

(b) Observer coverage;

(c) Logsheet catch and effort data;

(d) Annual catch estimates from Japan, and for Vietnam as they impact on the stocks in the Convention Area;

(e) Size data from Chinese Taipei and Korea; and

(f) port sampling of purse-seine catches taken in the WCPO that are unloaded in Thailand or of tuna caught in the coastal fisheries of Japan.

An assessment on the impacts of FADs on juvenile tuna stocks in the Convention Area

28. WG.II discussed the impacts of FADs on WCPO tuna fisheries and stocks, including juvenile age-classes. WG.II noted that the use of FADs can have both direct and indirect impacts on fisheries, the tuna stocks they target and other pelagic species. These impacts can be both positive and negative.

29. The use of FADs concentrates a wide range of target and non-target pelagic fish species and has a range of uncertain impacts on these species and the associated ecosystems. To better understand the scope of this issue it would be useful if the SCTB could compile any readily available information for future PrepCon consideration.

30. In recognition that harvests by all gears have an impact on the yellowfin and bigeye stocks, the SCG discussed the relative impacts of different gears, including those utilising FADs, on estimates of yield and biomass (referring to WCPFC/SCG 2/05). In the case of yellowfin tuna, the Philippine and Indonesian fisheries (predominantly based on FADs) may have had the greatest estimated impact. With the addition of other FAD-based fishing it is clear that fishing

utilising FADs is a major source of impact on the yellowfin stock. In the case of bigeye, the vast majority of the bigeye catch taken by purse seine was due to sets on floating objects.

31. WG.II considered that the use of FADs may reduce the yield per recruit and hence MSY for bigeye and possibly yellowfin tuna stocks in the WCPO relative to those that would occur if the fish were taken by long line gear or purse-seine sets on unassociated schools. In order to provide better advice on this matter, yield per recruit analyses for different gear selectivities for both these species are required.

32. In summary, as in other global tuna fisheries, the use of FADs has increased fishing efficiency for skipjack tuna, but it has increased fishing mortality rates of juvenile yellowfin and bigeye tuna, increased purse seine bycatch rates of other pelagic species and increased uncertainty in stock assessments.

Research planning, priority setting and co-ordination

33. WG.II discussed interim, transitional and longer term research planning, priority setting and co-ordination. SCG 2 noted that in the transitional and longer-term the Scientific Committee, once established, would need to develop a research plan and also address co-operation issues for the Commission.

34. In the interim period, several key points were made:

- research needs for members and the PrepCon will vary;
- funding streams for research include the PrepCon, Members and existing regional organizations;
- the term ‘research’ was interpreted to include projects for implementing data collection programmes, as well as more the traditional research projects such as stock assessment;
- criteria need to be developed for research priority setting; and
- not all criteria need to be met by every project, but all should be explicitly considered in assessing projects.

35. The following research projects were identified as priorities:

- better characterisation of current catch and catch composition from Indonesia, Philippines, and for Vietnam as they impact on the stocks in the Convention Area;
- reconstruction of early catch history (catch, effort, size composition) for all fisheries;
- further development of methods to standardise effort, including the better use of vessel operational details, environmental data and archival tagging data;
- ongoing efforts to reduce uncertainty in assessments, through improved data inputs, sensitivity analysis and simulations;
- evaluation of possible regime shifts/changes in productivity and development of improved/alternative estimates of recruitment where possible; and
- large scale tagging experiments for the main target tuna species in the WCPO.

36. WG.II identified dot points 1,2 and 6 for further development as research proposals to reduce uncertainty in the stock assessments. WG.II agreed that when available the proposals should be further considered by PrepCon.

37. WG.II noted the following draft priority criteria for evaluating proposals developed by SCG 2:

- will the project address management needs/uncertainty in stock status;
- urgency;
- feasibility;
- cost-effectiveness;
- potential for capacity building; and
- special requirements of developing States in the Convention Area, particularly small island developing States.

The role of existing regional organizations in obtaining the best available scientific and other fisheries-related information (Agenda item 6)

38. WG.II agreed that the Oceanic Fisheries Programme of the Secretariat for the Pacific Community should play a key role in the scientific work of the Commission during the transitional period. Specific roles for the OFP in data management are described in Annex III.

39. WG.II recommended that the Commission stock assessments for the four major species, bigeye tuna, skipjack tuna, south Pacific albacore and yellowfin tuna be undertaken by scientists from the OFP, in cooperation with other scientists as appropriate (including those from members), during the transitional period according to the structure and function described in Annex III.

40. WG.II recalled article 22, paragraph 2, of the Convention regarding the need to make suitable arrangements for consultation, cooperation and collaboration with other relevant intergovernmental organizations, particularly those which have related objectives and which can contribute to the attainment of the objective of the Convention.

Approaches to ecosystem and bycatch issues.

41. This agenda item was deferred to the next session of the Preparatory Conference.

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Annex I

AGENDA

1. Introductory remarks
    - Welcome
    - Review of the purpose of WG.II
2. Adoption of the agenda
3. Consideration of the provisional structure for the scientific functions of the Commission.
4. Special requirements of developing States and territories with respect to data requirements and technical capacities.
5. Consideration of the report of SCG 2 (WCPFC/PrepCon/28), including summary statements on the status of stocks
6. The role of existing regional organizations in obtaining the best available scientific and other fisheries-related information.
7. Approaches to ecosystem and bycatch issues.
8. Research priorities, research planning, and coordination.
9. Other business
10. Adoption of the report of WG.II
11. Adjournment

Annex II

LIST OF DOCUMENTS USED TO ASSIST DISCUSSIONS AT WG.II

WCPFC/PrepCon/WP.15/Add.1

Capacity of Pacific Island Countries and Territories to meet the likely data requirements of the Western and Central Pacific Fisheries Commission. SPC Report dated September 2003. 38 p.

WCPFC/PrepCon/28

***Report of the second meeting of the Scientific Coordinating Group (SCG 2)Western and Central Pacific Fisheries Commission*.** Report dated 6 August 2003. 20 p.

Annex III

STRUCTURE FOR THE SCIENTIFIC FUNCTIONS OF THE COMMISSION DURING THE TRANSITIONAL PERIOD

This document outlines key features of the structures required for the scientific functions of the Commission during the transitional period (3 to 5 years). During this period the structure and functions of the science secretariat must be flexible and adaptable in order to meet changing needs. An independent review of the transitional structure and function should be carried out two years after entry into force of the convention, or earlier if required, to determine the effectiveness of the science structure and recommend changes as appropriate.

SCIENCE DATA FUNCTIONS

Personnel

Secretariat database and data management function

- One database manager (senior with high level qualifications in database management and information technology)
- One observer coordinator (half time as science observer coordinator and half time as monitoring, control and surveillance observer coordinator; senior level with extensive at sea experience, organizational skills, contract development and management)

Science data management

Contract data managers (Oceanic Fisheries Programme (OFP) during the transitional period) to be determined by the Commission with contractual arrangements.

Principles and procedures relating to data compilation and dissemination will be established by the Commission. These principles and procedures could be derived from the current working model used by the OFP and described in the report of the 11th meeting of the Statistics Working Group of the Standing Committee on Tuna and Billfish (1998).

The types of data to be compiled to include the following:

- annual catch estimates, by species and gear type;
- size composition;
- operational catch and effort data;
- unloadings or transhipment data;
- port sampling data;
- observer data;
- gear and vessel attribute information;
- other types of data as required for research purposes.

SCIENCE FUNCTIONS

Personnel

Secretariat science management function

- One science manager (senior with high level qualifications including broad experience in fisheries science and project management)

Contracted research (e.g. stock assessment)

Example of primary stock assessment contracted to external provider (e.g. OFP during the transitional period).

- Scientific research (including outputs and timing) to be determined and initiated by the Commission (science manager in Secretariat to facilitate)
- Data required for stock assessments to be provided by the contract data manager under direction from the Commission as per principles and procedures for data dissemination
- Research contractors will meet with the Science Secretariat and may meet with the Specialist Working Group during early phase of research to consider and collaborate on technical details of contracted research. The nature and extent of any interaction will require consultation between the contractors and the Commission (Science Secretariat to facilitate)
- Outputs from contracted scientific research to be provided to the Scientific Committee and to the Commission
- Expert peer review may be required by Commission
- Scientific research provided to the Scientific Committee will be reviewed and discussed by a Specialist Working Group of the Scientific Committee (open to member scientists, and interested parties by application or invitation)
- Specialist Working Group of the Scientific Committee to meet (e.g. one week) and prepare advice to the Scientific Committee, as required
- Scientific Committee to meet (e.g. three days) and formulate recommendations to the Commission based on advice from the Specialist Working Group
- Scientific Committee chair, contracted stock assessment scientist and external expert peer reviewer (as required) present reports to meeting of the Commission

Example of possible time frame for assessment process:

- August 2004 – Contract agreed and signed
- April 2005 - Data available up to end of 2003
- May 2005 – Contractors initiate assessments with input from Specialist Working Group and Science Secretariat, as required
- July 2005 – Stock assessment report completed and delivered to the Commission and Scientific Committee
- September 2005 – **Specialist Working Group** meeting to review stock assessment and consider possible improvements for assessment in following years

- September 2005 – **Scientific Committee meeting** to consider stock assessment advice
- November 2005 – **Commission meeting** including presentation of Scientific Committee report and contractor's assessment report

It is envisaged that Specialist Working Groups and the Scientific Committee will meet once each year. The Specialist Working Groups are part of the Scientific Committee.

If an expert peer review is required documentation should be distributed to the reviewer in July/August 2005.

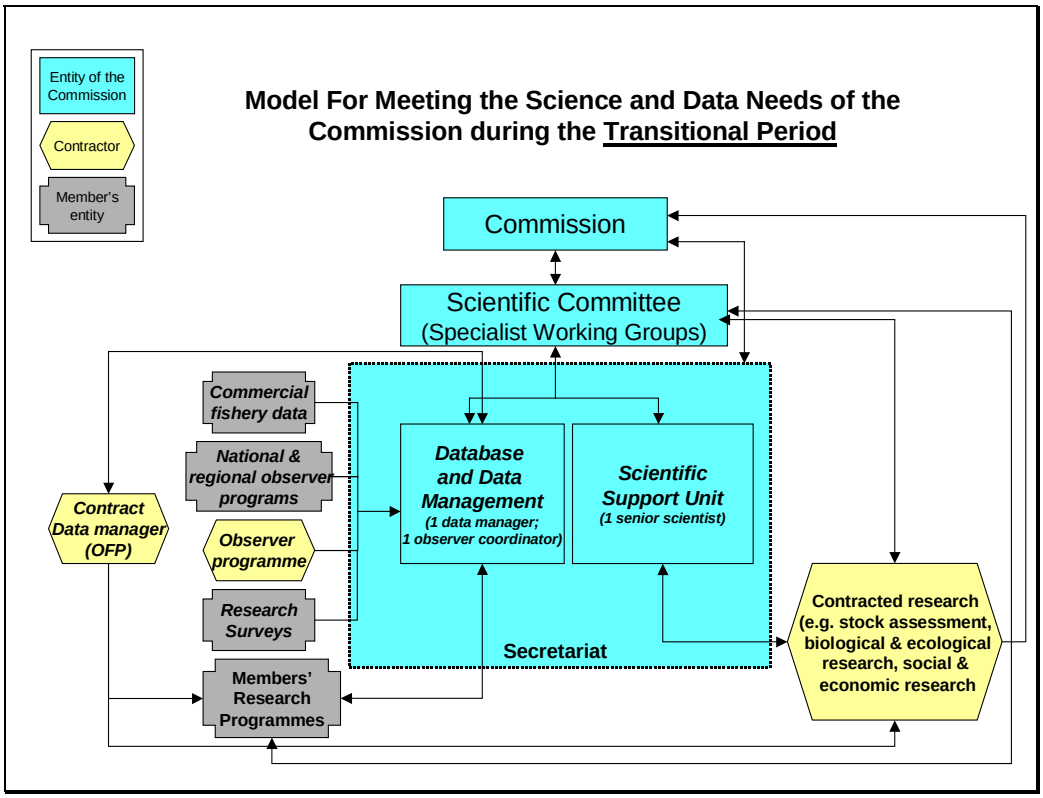
Stock assessments for individual species may not be undertaken on an annual cycle. The frequency of stock assessments will be determined by the Commission.

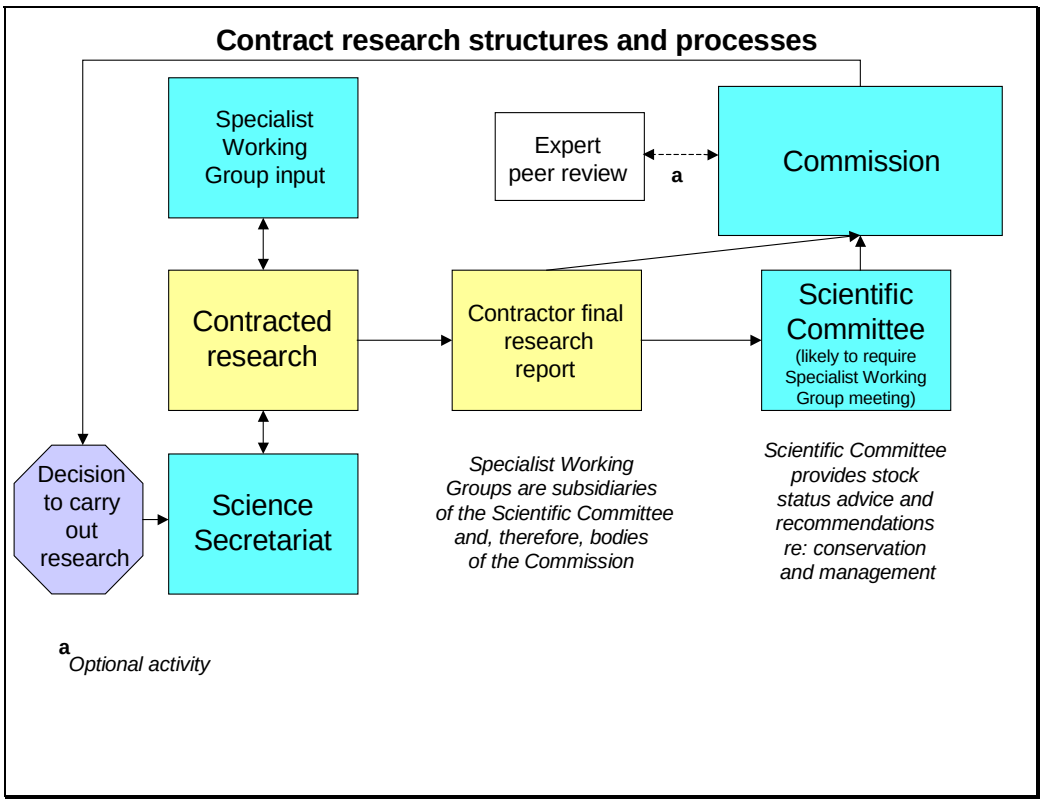
Rules of Procedure for the structures and functions described to be developed and discussed during PrepCon VI.

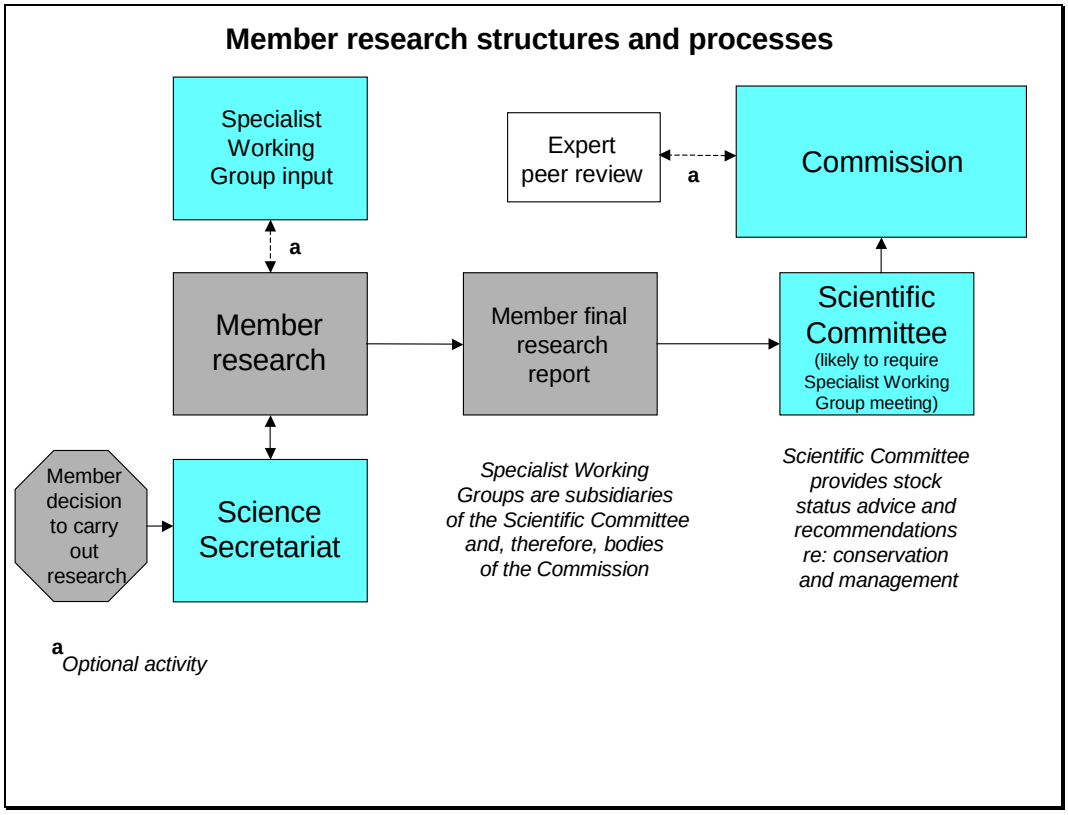
Members' research

- Members to communicate to Secretariat regarding their intentions to carry out self-initiated research activity to be presented to the Scientific Committee at a future date (science manager in Secretariat to facilitate)
- Data required for research to be provided by the contract data manager under direction from the Commission as per principles and procedures for data dissemination (science manager and data manager in Secretariat to assess the request)
- Scientific research provided to the Scientific Committee to be reviewed and discussed by a Specialist Working Group of the Scientific Committee (open to member scientists, and interested parties by application or invitation)
- Specialist Working Group of the Scientific Committee to meet (e.g. one week) and prepare advice to the Scientific Committee
- Scientific Committee to meet (e.g. three days) and formulate recommendations to the Commission based on advice from the Specialist Working Group
- Scientific Committee chair presents report to meeting of the Commission

Scientific Committee functions are as defined in Article 12 of the Convention. Specialist Working Groups are subsidiary bodies of the Scientific Committee. Terms of reference will be required for the Specialist Working Groups, and their functions will include in-depth review of stock assessments and identification of research needs.


Entity of the Commission
Contractor
Member's entity
Model For Meeting the Science and Data Needs of the Commission during the Transitional Period
Commission
Scientific Committee (Specialist Working Groups)
Commercial fishery data
National & regional observer programs
Observer programme
Research Surveys
Members' Research Programmes
Contract Data manager (OFP)
Database and Data Management (1 data manager; 1 observer coordinator)
Scientific Support Unit (1 senior scientist)
Secretariat
Contracted research (e.g. stock assessment, biological & ecological research, social & economic research


Contract research structures and processes
Specialist Working Group input
Expert peer review
a
Commission
Contracted research
Contractor final research report
Scientific Committee (likely to require Specialist Working Group meeting)
Decision to carry out research
Science Secretariat
Specialist Working Groups are subsidiaries of the Scientific Committee and, therefore, bodies of the Commission
Scientific Committee provides stock status advice and recommendations re: conservation and management
a Optional activity


Member research structures and processes
Specialist Working Group input
a
Expert peer review
a
Commission
Member research
Member final research report
Scientific Committee
(likely to require Specialist Working Group meeting)
Member decision to carry out research
Science Secretariat
Specialist Working Groups are subsidiaries of the Scientific Committee and, therefore, bodies of the Commission
Scientific Committee provides stock status advice and recommendations re: conservation and management
a Optional activity

Annex IV

PROPOSAL FOR MONITORING THE CATCHES OF HIGHLY MIGRATORY SPECIES IN THE PHILIPPINES AND THE PACIFIC OCEAN WATERS OF INDONESIA

BACKGROUND

Annual catches of pelagic tuna in the Philippines and the Pacific Ocean waters of Indonesia have been estimated to be 599,612 tonnes in 2002, which represents 29.9% of the total catch of pelagic tuna in the Western and Central Pacific Ocean (WCPO). While the catches of bigeye, skipjack and yellowfin in the Philippines and Indonesia thus represent an important component of the catches in the WCPO, there are important gaps in the data available for stock assessments. Little or no information is available concerning the catches of other highly migratory species listed in Annex I of the 1982 Convention on the Law of the Sea, such as billfish and sharks.

The lack of species composition data and size composition data covering tuna fisheries in the Philippines and Indonesia, and questions regarding the accuracy and reliability of annual catch estimates, have been highlighted at meetings of the Standing Committee on Tuna and Fisheries (SCTB) for many years. It was noted in the Executive Summary of the Sixteenth Meeting of the SCTB (9–16 July 2003, Mooloolaba, Australia) that:

> *"estimates of annual catches for the domestic fleets of Indonesia and the Philippines have been provided on a timely basis; however, annual catch estimates in recent years (1992–2002 for Indonesia and 1997–2002 for the Philippines) have not been broken down by gear type and estimates of annual bigeye and yellowfin catches for all years have been reported as a combined catch. Catch data at a higher resolution and effort data have not been provided. Species composition and size data have been collected in the Philippines since 1997, but this programme was interrupted in 2002 due to funding constraints. No sampling is being conducted in the Pacific Ocean waters of Indonesia."*

The lack of accurate catch statistics, effort data, and species composition and size composition data for the Philippines and Indonesia has been responsible for much of the uncertainty in the MULTIFAN–CL stock assessments for bigeye and yellowfin. As a consequence, at the First Meeting the Scientific Coordinating Group (SCG) (29–31 July 2002, Honolulu, United States of America),

> *"the SCG recommended that the data available for stock assessment should be improved by strengthening of data collection (improved catch, effort and size composition data) from Indonesian and Philippine domestic fisheries."*

Noting that one of the highest priorities is the strengthening of data collection covering the domestic fleets of Indonesia, the SCG developed a proposal for a port sampling programme in the Pacific waters of Indonesia, which was considered at the Third Session of PrepCon (22–28 November 2002, Manila, Philippines).

Furthermore, at the Second Meeting of the SCG (17–19 July 2003, Mooloolaba, Australia),

"SCG 2 acknowledged that the lack of data from Indonesia and the Philippines is a serious concern because they contributed substantially to the uncertainties in the stock assessments. Given that the stock status of both the yellowfin and the bigeye stocks were either approaching or possibly have exceeded, sustainable levels, the meeting urged Working Group II to bring this situation to the attention of the PrepCon5. SCG 2 further requested Working Group II to ask PrepCon5 that it consider, as a matter of urgency, ways in which participants could assist in improving this situation. If this data gap cannot be resolved it is likely that the SCG will not be able to determine whether the stock status of these two stocks is continuing to worsen or not and, in the face of continued uncertainty, calls for a precautionary management intervention may ensue."

Both the Standing Committee on Tuna and Billfish and the Scientific Coordinating Group strongly support improved monitoring of the tuna fisheries of the Philippines and the Pacific Ocean waters of Indonesia. In recent years, the monitoring of tuna fisheries in the Indian Ocean waters of Indonesia has improved through a project implemented by the Research Institute of Marine Fisheries (RIMF), Bogor Agricultural University (IPB), the Commonwealth Scientific and Industrial Research Organization (CSIRO) of Australia and the Indian Ocean Tuna Commission (IOTC), with funding from the Australian Centre for International Agricultural Research (ACIAR) and the Overseas Fisheries Co-operation Foundation (OFCF) of Japan. At a meeting held in Jakarta on 7 August 2003 to review the project, strong support for the extension of the monitoring (including a review of the fisheries and the establishment of port sampling) to the Pacific Ocean waters of Indonesia was expressed by the Ministry of Marine Affairs and Fisheries, the Directorate General of Capture Fisheries (DGCF), the Indonesia Tuna Association (ASTUIN), RIMF and IPB. Strong support for improved monitoring in the Philippines has been expressed by the Bureau of Fisheries and Aquatic Resources (BFAR).

This proposal has been prepared for preliminary consideration of funding by PrepCon delegations. It represents an outline of a monitoring project for Indonesia and the Philippines that will take place over a two-year period. It is hoped that by the end of the project, Indonesia and the Philippines will have identified and allocated the resources required to continue the monitoring without external support.

The proposal contains indicative estimates of the costs of each of four activities. If PrepCon delegations express a sufficient level of interest in funding, then a full proposal, with detailed cost estimates, will be developed by SPC and CSIRO, in collaboration with the agencies of Indonesia and the Philippines.

PROPOSED ACTIVITIES

Two activities are proposed for each of the Philippines and the Pacific Ocean waters of Indonesia: (a) a review of the tuna fisheries, including a description of the fisheries and the current statistical system, and (b) a port sampling programme.

1. Review of tuna fisheries in the Philippines

The review of tuna fisheries in the Philippines will include:

- a review of the historical development of the tuna fisheries;
- information on the current structure of the industrial and artisanal fleets, including estimates of the number of vessels by gear type and size class;

- summaries of industrial and artisanal catch statistics that are currently available from the Bureau of Agricultural Statistics (BAS) and BFAR; and
- a review of the current statistical systems employed by BAS for the collection and compilation of catch statistics, including recommendations for improvements.

The cost for the compilation and reporting of the above information, primarily consisting of travel expenses for BAS, BFAR, SPC and possibly CSIRO staff over a period of two years, is expected to be about US$ 50,000.

2. Port sampling of tuna fisheries in the Philippines

Port sampling activities in the Philippines have been conducted under the National Stock Assessment Project (NSAP) since 1997 and covered more than 200 sites in 2002. However, this sampling, which was funded by the Philippines government, was halted in August 2002 due to funding constraints.

It is proposed that port sampling be restarted in the major tuna landing sites, including General Santos City, Zamboanga, Davao City, one port in the Samar region and one port in the Bicol region. It is anticipated that US$ 100,000 will be adequate to employ a sufficient number of local port samplers for baseline sampling of the species composition and size composition of the catch over a period of two years; to cover travel expenses for BFAR and SPC staff; and to support data processing by BFAR.

3. Review of tuna fisheries in the Pacific Ocean waters of Indonesia

The review of tuna fisheries in the Pacific Ocean waters of Indonesia will include:

- a review of the historical development of the tuna fisheries;
- information on the current structure of the industrial and artisanal fleets, including estimates of the number of vessels by gear type and size class;
- summaries of industrial and artisanal catch statistics that are currently available from DGCF, provincial agencies and industry; and
- a review of the current statistical systems employed by DGCF and provincial agencies for the collection and compilation of catch statistics, including recommendations for improvements.

The review will be modelled on a similar project that has been carried out for the Indian Ocean waters of Indonesia by CSIRO, RIMF and IPB.

The cost for the compilation and reporting of the above information, primarily consisting of travel expenses for RIMF, IPB, CSIRO and SPC staff over a period of two years, is expected to be about US$ 50,000.

ACIAR has indicated interest in funding this component of the proposal.

4. Port sampling of tuna fisheries in the Pacific Ocean waters of Indonesia

Port sampling of tuna fisheries in the Pacific Ocean waters of Indonesia will be modelled, in part, on the port sampling that has been conducted by RIMF and CSIRO for the long line fleet fishing in the Indian Ocean waters of Indonesia and unloading in Muara Baru, Cilicap and Benoa.

Industrial ports that will be sampled in the Pacific Ocean waters of Indonesia will include Bitung, Sorong, Biak and perhaps others. Several artisanal ports may also be sampled. It is anticipated that US$ 125,000 will be adequate to employ a sufficient number of local port samplers for baseline sampling of the species composition and size composition of the catch over a period of two years; to cover travel expenses for RIMF, CSIRO and SPC staff; and to support data processing by RIMF.

CAPACITY BUILDING

All four of the above activities will involve capacity building within agencies of Indonesia and the Philippines. For Indonesia, areas in which capacity building will occur include supervision of sampling programmes, training of port samplers, sampling the species composition and size composition of the catch, database management, data analysis and report preparation. For the Philippines, which has already developed its capacity for supervision, training and sampling, areas in which capacity building will occur primarily include database management, data analysis and report preparation. Building capacity in these areas will enhance Indonesia and the Philippine's abilities to fulfil their obligations with respect to the Commission.

CONCLUSIONS

- The proposed monitoring of catches of highly migratory species in the Philippines and the Pacific Ocean waters of Indonesia is essential to reduce uncertainties in stock assessments, particularly for bigeye and yellowfin.

- The proposed monitoring is strongly supported by the scientists participating in SCTB and SCG, and by government agencies and industry within Indonesia and the Philippines.

- The proposed monitoring will result in capacity building that will enhance the abilities of Indonesia and the Philippines to fulfill their obligations to the Commission.

- Australia has indicated an interest in funding one of the activities of the proposal, i.e. the review of tuna fisheries in the Pacific Ocean waters of Indonesia.

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