この文書の日本語版は、現在作成中です。日本語版が出来上がり次第このウェッブサイトに掲載します。

この文書の日本語版完成時期の詳細については、電子メールアドレス <u>sec@ccsbt.org</u>までお問い合わせください。

ご迷惑をおかけしました。

Commission for the Conservation of Southern Bluefin Tuna



みなみまぐろ保存委員会

### Report of the Third Annual Meeting (Revised)

24 - 28 September 1996 Canberra, Australia

#### Report of the Third Annual Meeting 24 - 28 September 1996 Canberra, Australia

The representatives of the Governments of Japan, New Zealand and Australia met for the Third Annual Meeting of the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) from 24 to 28 September 1996.

The meeting was chaired by Dr Alison Turner (Australia). Arthur Hore (New Zealand) was Vice-Chair.

#### Agenda Item 1: Opening of Meeting

The Chair welcomed observers from the Republic of Korea, Indonesia, Taiwan and the Indo-Pacific Tuna Programme (IPTP). Mr Morishita from Japan was also identified as the observer for the International Commission for the Conservation of Atlantic Tunas (ICCAT) and Mr Edwards from New Zealand was identified as the observer for the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR).

The agreed agenda and list of participants for the meeting are at **Attachments A** and **B**, respectively.

Rapporteurs were appointed as follows: for Japan, Mr Morishita and Mr Komatsu, for New Zealand Ms Robinson and for Australia Mr Hermes and Mr Cassells.

#### Agenda Item 2: Opening Statements

All parties recognised the need for the Commission to demonstrate its effectiveness as an international fisheries management organisation in ensuring a sustainable and responsibly managed fishery. All parties acknowledged the excellent support of the new Secretariat.

#### 2.1 Japan

Mr Morimoto, head of the Japanese delegation, emphasised that the CCSBT should demonstrate to the world its usefulness and effectiveness as a responsible regional fisheries organisation by:

- a) presenting the detected recovering trends of Southern Bluefin Tuna (SBT) stocks on the basis of the best currently available data;
- b) establishing and implementing appropriate conservation, management, and optimal utilisation measures; and
- c) managing its activities openly and equitably by respecting established rules.

However, he expressed his deep regrets as the CCSBT had not fulfilled its responsibility as a regional fisheries organisation. This was because the CCSBT was in an impasse with regard to the SBT stock assessment and projection of future trends despite the long history of work by the scientists of Japan, Australia, and New Zealand. For the purpose of finding a way out from this difficult situation, Japan had proposed, amongst other things, an Experimental Fishing Program (EFP) at the last annual meeting of the CCSBT.

Japan had proposed to discuss two items at the 1996 Scientific Committee of the CCSBT: Total Allowable Catch (TAC) recommendation and EFP including a Pilot Program.

With regard to the TAC recommendation, Japan regretted that no discussion was conducted at the Scientific Committee meeting because of the shortage of time, although an agenda item had been established for the issue. However, judging from information presented at the Scientific Committee, showing the recovering trend of SBT stocks, Japan would propose to increase TAC at this annual meeting of the CCSBT.

Japan also expressed serious concerns that the issue of EFP had not been taken up at the Scientific Committee because of objections from other parties. The failure to respect the timetable for EFP, agreed at the Special Meeting in May this year, would jeopardise the international credibility of the CCSBT. In an attempt to restore the situation, Japan had proposed to hold a workshop regarding EFP and its Pilot Program. Japan urged the CCSBT to agree on the proposal to hold the workshop at the earliest possible time.

Japan expressed its regret that the Scientific Committee had failed to produce an agreed report to the Commission. Japan believed it was essential to establish open and equitable rules of procedures for the Scientific Committee to rectify and improve the past practices for report preparations, decision making, and other procedural matters. Japan commended the efforts of scientists who had continued to work on the report and had succeeded in finalising it.

Noting the various international initiatives for the conservation and management of tuna stocks, including the UN Straddling Fish Stocks and Highly Migratory Fish Stocks Agreement and others, Japan expressed its willingness to provide its best efforts and support to the CCSBT to attain its mission as a responsible regional fisheries organisation. Japan's opening statement is at **Attachment C**.

#### 2.2 New Zealand

New Zealand recognised that over the last fifteen years, the three parties had developed a solid foundation for continued collaboration. This was evident in the Commission's willingness to work through several difficult issues over the last year, including the setting of a TAC and consideration of experimental fishing. However, despite making some progress in the recent Special Commission Meetings and the technical workshops, New Zealand believed a considerable amount of work was yet to be done in addressing a number of important issues still facing the Commission.

New Zealand considered that the issues the Commission must resolve include:

• **stock status** - the parental biomass is severely depleted and recent recruitment has yet to contribute to a significant rebuild of the parental stock. There is a need to

take positive action to rebuild the parental biomass;

- **scientific process** the recent Scientific Committee meeting spent much time debating procedure. The Commission needs to determine solutions to these issues to allow effective functioning of the scientific meetings;
- **uncertainty** there is a need to develop a programme of work to resolve the sources of uncertainty in the stock assessment and recognise that although experimental fishing may be one component of such a programme, it will not resolve all or even necessarily the most important sources of uncertainty;
- **non-parties** steps need to be taken to encourage the accession or cooperation of non-parties to the Commission; and
- **international credibility** the Commission should recognise that there is increasing criticism from other entities about the status of the southern bluefin tuna stock. Steps should be taken to ensure the Commission is seen as a credible and responsible management body.

New Zealand believed that the development of a management plan is fundamental to resolving many of the issues the Commission faces. If the Commission cannot at least develop a shared understanding of our objectives, New Zealand believes the Commission will flounder when trying to agree to more specific management actions. New Zealand's objective for this meeting is for the Commission to develop an agreed programme of work designed to maximise the use of our joint resources to address the key issues outlined above. New Zealand's opening statement is at **Attachment D**.

#### 2.3 Australia

Australia stressed its complete commitment to the successful operation of the Commission, and through that, to effective international management of the southern bluefin tuna fishery.

Australia expressed its regret that demands for change to the established and practicable scientific processes of the Commission had affected the Scientific Committee's capacity to conduct the comprehensive stock assessment so vital to the functioning of the Commission.

Australia considered the credibility, competence and calibre of the Commission were at stake and urged the Commission to embrace sound standards of fisheries management in a way which genuinely reflects the uncertainties in the stock assessment and the current status of SBT stocks. The SBT stock is depleted to levels far below the 'safe' 1980 level of parental biomass and to levels which represent an alarmingly small proportion of virgin biomass.

Australia indicated its willingness to explore ways to address the current difficulties facing the Commission. This includes ensuring the integrity of the Commission's scientific work and producing assessments which can stand up to international scrutiny.

Australia sought a clear separation of the scientific and management processes. Australia stressed that the Commission had already agreed that additional catch, even for experimental fishing, would only be contemplated if it could be shown not to jeopardise stock recovery.

The Commission's job is to identify the best way to deal with differences and uncertainties, to strengthen the co-operative framework built over the last 15 years, and to secure a healthy future for parties' SBT industries by providing for stock recovery to safe and sustainable levels. Australia's opening statement is at **Attachment E**.

#### 2.4 Other States and Entities

#### 2.4.1 The Republic of Korea

The representative of the Republic of Korea acknowledged the importance of the CCSBT in the management of SBT stocks and welcomed the CCSBT's recent initiatives in the field of the conservation and management of the stocks. He noted the Republic of Korea's active participation in various international fisheries organisations and its domestic fisheries policy promoting sustainable management.

Korea would cooperate with the CCSBT in the conservation and management of SBT and, in principle, would be willing to consider joining the CCSBT. However, there was no consensus in the Republic of Korea on how to join the organisation because the catch allocation for new entrants would be so small that the Korean fishing industry would not be able to sustain their fishing business. Korea asked the CCSBT to understand the difficult situation and requested to have a second thought on the catch allocation system for new entrants.

#### 2.4.2 The Republic of Indonesia

Indonesia confirmed that it had received the CCSBT letter requesting Indonesia to join the organisation. Although Indonesia regards the CCSBT as useful for the conservation and management of SBT, it would like to remain as a non-convention member, as in the last year. The representative of Indonesia recognised the lack of sufficient fisheries information in his country and expressed Indonesia's commitment to study the situation seriously. He emphasised the importance of cooperation from the members of the CCSBT to improve the situation.

#### 2.4.3 Taiwan

The representative from Taiwan advised that Taiwan had assigned one scientist to study SBT matters along with a budget of US\$ 130,000 for research. With this new resource, Taiwan would be able to send its representatives to the next CCSBT Scientific Committee meeting and enhance monitoring of its SBT catches. Taiwan has also introduced a Vessel Monitoring System (VMS) to collect catch and other fisheries data and provide daily reporting of catch statistics to authorities. Taiwan hopes to obtain more accurate data through this system.

#### 2.4.4 IOTC-FAO-IPTP

The representative from the Indian Ocean Tuna Commission (IOTC), who also represented Food and Agriculture Organisation (FAO) and IPTP, stated that the first meeting of IOTC will be held in December 1996 and that IOTC would take over the functions of IPTP once it became fully operational. IOTC hoped that the cooperative relationship between the CCSBT and IOTC would be further strengthened, and extended an invitation to the CCSBT to attend its first meeting as an observer.

#### Agenda Item 3: Relation to other Bodies

#### 3.1 CITES - including action by IUCN relating to the listing of SBT

The Commission noted that the IUCN Red List of Threatened Animals would be released in October 1996 and would include southern bluefin tuna as critically endangered. The recommendation to list SBT as critically endangered included a caveat which recognised that the listing criteria do not always lead to equally robust assessments of extinction risk which depend on the life history of the species, particularly those with high reproductive potential.

Although the IUCN workshop which developed the recommendation to list SBT included scientific representatives from Australia and Japan, the Commission noted that it had little opportunity to provide input. Although there are no direct management or legislative implications of the listing, the Commission agreed that the listing was likely to have political implications. More specifically, the Commission noted that a number of entities viewed SBT as under threat and they would not hesitate to use the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) as a vehicle, irrespective of the damage to SBT fishing industries.

#### The Commission recognised the need to ensure that the relevant organisations and entities were fully aware of the work being done by the Commission and agreed on the following course of action:

- a) the Secretariat will make formal representation to the IUCN, including the Species Survival Commission, seeking agreement for the CCSBT to be represented in technical meetings where SBT and related issues are to be considered. This includes any review of the Red List Criteria for marine species;
- b) advise the Species Survival Commission of the Commission's views about the listing of southern bluefin tuna on the IUCN's Red List of Threatened Animals and the criteria used;
- c) the Secretariat will coordinate the preparation of an information paper setting out the CCSBT position on SBT and action taken to facilitate stock recovery. The paper should include reference to the qualifications attached to the IUCN listing. This paper would be used for distribution to the IUCN, interest groups

and the media as required;

- d) the Commission will begin work to develop and document an effective management strategy to rebuild the southern bluefin tuna. This would be a component of a process to demonstrate the competence of the CCSBT;
- e) the Secretariat will make formal representation to the CITES Secretariat informing them of the CCSBT role in SBT management and requesting that the CCSBT be advised, as soon as practical, of any recommendations to list SBT or Atlantic bluefin tuna under CITES; and
- f) the Secretariat to coordinate the preparation, by CCSBT members, of a draft communication which could be submitted to countries or entities which may seek consultations on a CITES listing of SBT, and to CITES should an application be made for a listing. The CCSBT is to study the approach adopted by ICCAT members in relation to proposals to list Northern Bluefin Tuna on CITES.
- *3.2 IOTC*

Mr Anganuzzi, the representative from the IOTC and the IPTP, reported that the IOTC had yet to develop a position about its association with the CCSBT and jurisdiction for the management of SBT. However, he reported that the IPTP viewed the CCSBT as the organisation responsible for the management of SBT.

The Commission noted that the IOTC would be meeting in December 1996 and the importance of establishing a relationship with the IOTC to confirm that the CCSBT is the most appropriate organisation to manage SBT.

The Commission endorsed the following course of action:

- a) the Acting Executive Secretary would attend the next meeting of the IOTC as an observer and seek leave to present a statement on behalf of the CCSBT;
- b) the statement to be presented would be coordinated by the Secretariat and developed cooperatively by the parties. The statement would advocate the CCSBT's primacy and competence for the management of SBT. It would suggest that the IOTC and the CCSBT develop a more formal arrangement for cooperation on issues including:
  - i) data exchange;
  - ii) management measures adopted by the respective organisations;
  - iii) reciprocal attendance at meetings; and
  - iv) recognition of the competence of the CCSBT to manage SBT.
- 3.3 ICCAT

Japan, who had represented the CCSBT at the last meeting of ICCAT, outlined the current arrangements, whereby:

- a) ICCAT recognises that the CCSBT manages SBT; and
- b) the two organisations have agreed to exchange information on management actions taken with respect to SBT.

The Commission noted that representations to ICCAT, or other international organisations in which the Commission may participate, should be collaboratively developed by the parties.

The Commission agreed that the Secretariat would determine the process within which the Commission could provide information to the management and technical meetings of ICCAT and that the Acting Executive Secretary would participate as an observer at the next ICCAT meeting.

#### 3.4 CCAMLR

Mr Edwards from New Zealand, who was representing CCAMLR, noted that the issue of the incidental mortality of seabirds is an area of mutual interest between the two organisations. In his role as a CCAMLR representative, Mr Edwards has undertaken to prepare a report about the Ecologically Related Species (ERS) issues in the CCSBT. New Zealand will coordinate the preparation of this report through the Secretariat and in collaboration with the other parties.

The Commission agreed that Mr Neil Hermes from Australia would represent the CCSBT as an observer at the next CCAMLR meeting to be held 21 October - 1 November 1996.

#### Agenda Item 4: Administrative Arrangements

#### 4.1 Appointment of Executive Secretary

Two meetings of Heads of Delegations were held to finalise the short list for the position of Executive Secretary and agree to processes to complete the selection process. A short list of five candidates was selected and further information, including referee's reports, on the candidates will be obtained. Interviews will be conducted by a panel, convened by Dr Alison Turner, comprising a nominee from each member country. Furthermore, procedures were agreed which will ensure that this selection process for the Executive Secretary, and the subsequent selection of the Deputy Executive Secretary, result in one Japanese national and one Australian or New Zealand national in these positions.

#### 4.2 Review of 1996 Budget, Draft 1997 Budget

The Commission endorsed the draft budget at Attachment F, subject to the following variations, and on the basis that the additional estimated expenditure of \$25,000 be met from the reserve funds carried over from 1996:

Additional Cost Areas	\$
Simultaneous interpretation at Annual Commission Meeting and one Special Meeting	46,000
Translation of Commission reports, Scientific Committee and ERS Committee reports (and Compliance Committee when formed)	15,000
Miscellaneous, Translation of Commission papers	5,000
Additional cost of publishing the annual Commission report	10,000
TOTAL	\$76,000
Proposed Savings	\$
ReduceAnnual meeting cost Supplementary Commission meeting costs	6,000 10,000
ReduceCost of Temporary staff	15,000
ReduceOverseas travel costs, Commission meeting in Canberra	15,000
ReduceRecruitment costs	5,000
TOTAL	\$51,000

The ad-hoc finance group recognised that the Commission will determine in the future whether or not, and the extent to which, the Secretariat shall develop a capacity in data and statistics compilation. However, in order to make this decision, the Commission will need information and advice from the Secretariat and the Scientific Committee. Action to develop that advice was endorsed by the Commission as part of the Program of Work for 1997.

#### Terms of Reference for the Finance and Administration Committee

The group considered it appropriate for the Secretariat to consult with international fishery management organisations on the existing functions and programme of work of their finance committee. The Chair of the Finance and Administration Committee, with the Secretariat, should develop draft Terms of Reference for the Committee for consideration intersessionally. Terms of Reference shall be agreed intersessionally to facilitate the operation of the Committee from 1997.

#### Chair of Finance and Administration Committee

The Commission agreed that Japan would be the initial Chair of the Finance and Administration Committee for two years.

#### 4.3 Amendment to Staff Regulations Relating to Social Security Contributions

# The Commission endorsed amendments to Staff Regulation 8.1 by replacing the words up to a maximum of 14% with up to the maximum percentage applying in the United Nations Secretariat from time to time.

#### 4.4 Adoption of Headquarters Agreement

As raised in a letter to the Chair dated 12 September 1996, an issue of domestic legal uncertainty has resulted in Australia being advised to delay the planned signature of the Draft CCSBT Headquarters Agreement.

Australia noted that this situation has no effect whatsoever on the day-to-day functions of the Commission Secretariat, and only relates to the question of an exemption from sales tax on goods purchased by the Commission in Australia. All of the other rights and obligations of the Commission in Australia had already been fully secured under relevant Australian law.

Australia said it was currently awaiting legal advice which has been sought in relation to the sales tax issue. Once this advice has been received, Australia would be better able to advise the Commission as to when the Australian Government is likely to be in a position to formally approve signature of the Agreement.

It was agreed that the Headquarters Agreement be signed intersessionally as soon as possible after the relevant domestic legal issues have been dealt with and Australian Government approval obtained.

#### Agenda Item 5: Review of SBT Fisheries

It was agreed that for future meetings of the Commission all members (and relevant invited observers) be asked to submit a brief written report under standard headings for this item. Reports would need to be submitted in sufficient time to allow both English and Japanese language versions to be distributed by the start of the meeting.

The agenda item would then consist of questions and discussion, after members had had an opportunity to consider all written fishery reports.

#### 5.1 Japan

Japan reported its 1995 catch at 5,866 tonnes out of the national quota of 6,065 tons. More detailed information about the Japanese fisheries is at **Attachment G**.

Japan provided its SBT import statistics for information (Attachment H).

When queried by Australia on what the assumed level of mortality was of non-retained SBT and how this was calculated, Japan noted that it assumed a survival rate of 55% of

those small SBT returned to the sea and as a result, assumed 45% mortality which was counted against Japan's quota. Japan indicated that it used the index of life status at catch that had been used by Australian observers and consideration of the trauma of capture to derive these assumptions.

Australia queried what the total weights of retained and non-retained fish were, what percentage level of observer coverage was achieved, how small fish were landed on board and if the Japanese catch of 5,866 was whole weight.

Japan responded that the weight of dead fish in the non-retained component was 711 tonnes and that they were included in the stated catch of 5,866 tonnes caught, which was stated to be whole weight. Japan indicated that 16 observer cruises had been undertaken, 11 by Japanese observers and 5 by Australian observers, with 890 and 258 sea days respectively for approximately 10 percent coverage. Japan also noted that the average weight of non-retained fish was 20.1 kg.

Australia expressed its concern on the basis for the Japanese assumptions on survivability, also noting that a much higher figure than 55% had been suggested by Japan in the Scientific Committee. Australia also noted that high seas observers had reported that a high proportion of fish were gaffed by Japanese fishers when landing small SBT. Japan maintained that non-retained small fish were not gaffed.

In response to Australia's request for further clarification about the calculation of the 55% survival rate figure and tonnage of non-retained fish, Japan agreed to provide a written explanation as soon as possible after the meeting.

New Zealand noted that it was unaware of the Commission formulating any policy that would support the releasing of small SBT and suggested that this be discussed in more detail. New Zealand suggested that there was a need for the Commission to develop a policy on non-retention of fish that would apply uniformly.

Japan noted that for its 1996/97 season total vessels numbers and areas of operation would be adjusted, partly as the delays in setting the 1995/96 quota had caused Japanese vessels some disruption.

Japan advised that its fishing vessels intend to continue releasing SBT under 25 kg during the 1996/97 fishing season.

#### 5.2 New Zealand

New Zealand reported recent trends in the New Zealand SBT fishery. They noted that Catch Per Unit Effort (CPUE) in the New Zealand Exclusive Economic Zone had declined in recent years and that there was some doubt whether the recent increase in juvenile abundance would contribute significantly to the rebuild of the parental biomass. New Zealand announced that it has reduced its voluntary catch limit by 16 tonnes for the 1995/96 season, because of excess catch in 1994/95. New Zealand explained to the Commission that the reduction from the following year's quota is an appropriate management response to overcatch. New Zealand stated that its overcatch was the result of a number of circumstances, particularly a dramatic increase in the domestic fleet and inadequate monitoring. In no way would this principle sanction the deliberate or planned intent to overcatch a country's catch limit in any year. New Zealand's statement is at **Attachment I**.

#### 5.3 Australia

Australia presented an overview of trends in its SBT fishery, elaborating on some aspects in response to questions from Japan. Major changes had occurred in the Australian SBT fisheries during the 1990s. Whereas virtually no Australian quota was taken by longline for most of the 1980s, more than half of the Australian 5,265 tonnes quota was longlined annually from 1990 to 1994 (predominantly by joint venture operations but about 300 tonnes were taken by domestic small-vessel longlining off NSW, TAS and SA). Australia's statement is at **Attachment J**.

Australia advised that no additional quota was allocated to extend the 1994/1995 fishing season.

Japan noted that Australia had unilaterally decided to extend its 1994-95 quota year by six weeks, when it might more appropriately have forgone the uncaught tonnage of what the Commission determines as a year's allocation. It questioned the procedures adopted for estimating tonnages of farm fish catches to debit against quota, highlighting the likely high mortality of purse seined fish and emphasising the need for observers on the vessels. Australia advised that all transfers were monitored by compliance staff, the fish counted using under-water video and sampled for weight to develop a tonnage estimate. Japan asked about mortality rates and weight loss of SBT which may occur during capture and transfer of SBT from purse seine nets to tuna farms. Australia noted that management conditions required fishermen to report all mortalities occurring at capture and prior to transfer to rearing cages for debit against quota. Australia noted that dead fish were debited against quota. Mortality during towing and transferring was reported as 1.4% in 1995 and 1.5% in 1996. Australia undertook to provide more information on these mortality rates.

Although it might be two to three weeks between capture of fish on the fishing grounds and their transport to Port Lincoln, feeding in tow cages commenced soon after capture, so that fish might even have gained weight prior to sampling to estimate debits against quota.

#### 5.4 Other States and Entities

#### 5.4.1 Taiwan

Taiwan presented a document describing its SBT fisheries (**Attachment K**). Estimated SBT landings by Taiwan were 1,003 tonnes in 1994 and 1,447 tonnes in 1995 (whole weight). Taiwan announced that it would restrict future catches to no higher than the 1995 level.

#### 5.4.2 The Republic of Korea

The Republic of Korea reported an increasing trend of its SBT catches for the last five years, reaching 650 tonnes by September 1996. The parties requested the Republic of Korea to restrain its catches and asked for some additional information about the Korean fisheries.

## The Commission agreed that the Chair would write to the Government of Korea, seeking information on their SBT fishery, which the Republic of Korea was unable to provide at this meeting.

Information to be requested in the letter would include:

- a) information on SBT catch in 1994 and 1995;
- b) number and type of boats that catch SBT, and where these boats operate;
- c) percentage of SBT catch which is sold to Japan compared to domestic use;
- d) where catch is landed;
- e) how the arrangements for monitoring catch levels operate; and
- f) the Government of the Republic of Korea's intention for future catch levels and whether it intends to restrain or limit future catch.

#### 5.4.3 The Republic of Indonesia

Indonesia was not in a position to report about its SBT catch but was willing to consider recommendations and advice from the Commission.

#### The Commission agreed that the Chair would also write to the Government of Indonesia, seeking information on the Indonesian SBT fishery, which was unable to be provided at this meeting.

Information to be requested in the letter would include:

- a) estimated Indonesian catch of SBT in 1993, 1994 and 1995, the estimates for earlier years, if available, and indicating whether the estimates are for processed or whole weight;
- b) if catch statistics are reported in whole weight, the conversion factor used to convert processed to whole weights;
- c) where the Indonesian catch of SBT is landed;
- d) percentage of the Indonesian SBT catch exported and percentage retained in Indonesia;
- e) how much Indonesian longline effort (number of hooks and operations) is expended below 30°s and what is the distribution by ocean and area;
- f) the distribution of SBT catch by ocean and area (5° square if possible), and by month;
- g) how the Indonesian catch and effort statistics are compiled and collected and monitoring systems in place to establish these statistics; and
- h) information on the size (length or weight) distribution of the Indonesian catch, and the size distribution.

#### 5.5 High Seas SBT Fishery - ITQ System

The Australian industry presented a paper on the use of Individual Transferable Quotas (ITQs) which is set out at **Attachment L**.

The Australian industry representative was asked if the system meant that ITQs could be traded between countries. He replied that this was not the case. Japan indicated that it had no intention of introducing an ITQ system in the near future because of several problems with the system from the viewpoint of fisheries management. For example, monitoring and enforcement of compliance would, in Japan's view, entail a large cost. There would be an incentive for high grading.

In response to a question from Japan, as to whether the Australian Government endorsed the proposal for ITQs, Australia indicated in the affirmative and advised that it would be pleased if Japan would consider using an ITQ system in its SBT fishery as it thought it might help Japan address some of the problems occurring in its fishery.

#### Agenda Item 6: FAO - Coordinating Working Party on Statistics

The Commission recognised the utility of sending a CCSBT observer to the 17th meeting of the FAO - Coordinating Working Party (CWP) on Statistics to be held at Hobart, Australia, in February 1997. The observer would be either the Executive Secretary or a member of the parties, who would report back the Commission on the costs and benefits for the CCSBT to join the CWP as a member. The Commission would consider its future approach to the CWP at the next annual meeting.

#### Agenda Item 7: Matter Arising from Previous Meeting - CCSBT Position on Kyoto Declaration and Other International Fishing Initiatives

The Commission considered an approach it may adopt in relation to other international organisations, other agreements and treaties, and instruments such as the Kyoto Declaration.

With regard to a general approach to various other international fisheries initiatives, the parties recognised the usefulness of the paper prepared by the Secretariat (Attachment **M**) and **agreed to its recommendations:** 

- a) that members of the Commission advise the Secretariat of relevant inter-governmental and other international organisations with which they are associated;
- b) that the Secretariat identify other inter-governmental or international organisations and international instruments which could affect the conservation and management of southern bluefin tuna;
- c) that the Secretariat report to the Commission on the relevant organisations and international instruments which could affect the conservation and management of southern bluefin tuna and include recommendations on

whether the Commission should:

- (i) take no action,
- (ii) monitor activities of the organisation,
- (iii) seek to collaborate with the organisation, which could include data
- (iv) exchange and inviting observers to Commission meetings,
- (v) seek to enter into formal arrangements with the organisation, or
- (vi) adopt all or part of the provisions of relevant international instruments.

The Commission concurred on the need for the forthcoming World Food Summit to recognise the contribution which sustainable fisheries production can make to world food security. In this regard they welcomed the Kyoto Declaration and Plan of Action as a means of drawing the Summit's attention to the importance of fisheries. Australia and New Zealand noted that they had been amongst a group of four countries which had lodged a statement expressing reservations about aspects of the Declaration and Action Plan at the time when it was adopted.

## Agenda Item 8:Ecologically Related SpeciesReport from the Ecologically Related Species Working Group

The Commission noted that the ERS Working Group had had its first meeting in December 1995 and thanked New Zealand for its efforts in arranging and providing excellent administrative support to the meeting.

It was noted that the report was a consensus report of the ERS Working Group meeting and as such was an adopted report of the Commission.

The Commission accepted Australia's offer to host the next meeting of the Working Group and decided that the ERS Working Group would meet in early 1997. Attention should be given to those issues identified in the 1995 ERS Working Group report (for example, the questions from 1995 and Appendix 7 to the report).

New Zealand and Australia were keen to maintain progress in work on ERS and drafted a set of questions and future actions which they had derived from the 1995 ERS Working Group Report. Japan considered that these questions and actions had been inappropriately derived, and that the ERS Working Group should first complete work which in Japan's view had yet to be addressed in response to the set of questions from the Commission in 1995. In the absence of agreement on how best to proceed with the conclusions and recommendations of the ERS Working Group Report it was **agreed that the matter would be considered further at the resumed third Annual Meeting of the Commission**.

#### Agenda Item 9: Report from Scientific Committee

#### 9.1 Status of SBT Stocks

9.1.1 Chair's Summary

The Commission agreed to a proposal from the Chair that a brief summary presentation

of the report of the Scientific Committee be made by the Chair of the Scientific Committee, and that the head scientist from each delegation would have the opportunity to provide a brief statement. It was agreed that discussion under this agenda item would be limited to these presentations, which are summarised below. The Report of the Scientific Committee is at **Attachment N**.

#### New biological information

- a) age at first reproduction could be older than the age 8 years presently used in assessments;
- b) present method of calculating age from length under-estimates age for fish older than 7 years;
- c) natural mortality of young fish is relatively high;
- d) review of conversion factors for calculating whole weight from processed weight found that the previously used factor was unsatisfactory. A new relationship for Japan style processing for the frozen fish market is given in the report. Japan had later asserted that the meeting concluded that further investigation on this matter was required. Australia and New Zealand noted that no short comings of the analysis or dissent with the results had been raised by any party during the meeting.

#### Catches

a) non-party catch in 1995 was 2,588t. This is the highest level yet recorded.

#### CPUE

- a) Figure 1 in the Scientific Committee report gives standardised CPUE adopted for the years assessment;
- b) Interpretations range from:
  - (i) substantial increase in the abundance of 4 year olds in the mid to late 1980's and 1990's, giving rise later to an increase in 6-7 year olds and some increase of 8-11 year olds by 1995; 12+ year olds remained at about the same abundance;
  - (ii) an increase in the abundance of 4 year olds in the early 1990's then decrease again, giving rise later to a slight increase in 6-7 year olds, and a continued slow decline of 8 to 11 year olds and 12+ year olds;
  - (iii) with B ratio providing one intermediate interpretation.
- c) This range of interpretations was carried into the VPAs and projections;
- d) The main uncertainties identified in the VPA's were:
  - (i) CPUE interpretation;
  - (ii) natural mortality rate;
  - (iii) emphasis given to juvenile CPUE;
  - (iv) inclusion or exclusion of recent fishing mortality estimate from tagging;
  - (vi) method of calculating the number of fish 12 years and older in the first year of

analysis;

- (vii) inclusion or exclusion of the requirement that the level of fishing mortality is related to the level of fishing effort.
- e) Different groups of scientists gave different weight to options within these uncertainties. These weights were used to calculate weighted means for various measures of stock status;
- f) Across all weightings by all groups of scientists:
  - (i) the parental biomass in 1995 was 25-39% of that in 1980;
  - (ii) the parental biomass in 1995 was 5-8% of that in 1960.
- g) For present catches, the probability of recovery to the 1980 parental biomass by 2020 was:

(i) Australia: 15% Australian documents also provided an assessment giving a 36% probability of recovery, which they considered a more reasonable estimate of recovery probability.

(ii) Japan: 79% Additional Japanese analyses with a slightly different VPA structure gave 20%, which they considered inconclusive until the cause of the sensitivity is further examined

(iii) New Zealand: 29%(iv) Ext.Scientists: 69%

- h) Projections were also conducted under illustrative EFP catch scenarios. These catch scenarios were:
  - (i) increase of 3,000 tonnes for 3 years, then return to current levels;
  - (ii) increase of 3,000 tonnes for 3 years, followed by a decrease to 3,000 tonnes below current levels for 3 years, then a return to present levels; and
  - (iii) permanent increase of 3,000 tonnes.
- i) Detailed results of these recovery probabilities under these catch scenarios are provided in the Scientific Committee report. However the main conclusions were:
  - (i) Across all the different analyses and weightings the recovery probability of a 3 year catch increase followed by a 3 year decrease was only 1-4 percent lower than the recovery probability under current catches. Japan considered this to be a negligible effect on the stock. Australia and New Zealand noted that a marginal change in the probability of recovery does not provide an adequate measure of overall risk and that the absolute level of the probability of recovery must be considered;
  - (ii) Across all the different analyses and weightings the probability of recovery decreased substantially for a permanent increase of 3,000t compared to the

probability under current catches;

- (iii) Australia and New Zealand noted that in the absence of management decision rules, reduction of the catch after the introduction of EFP could be problematic, and so the permanent increase of 3000t provides the most reasonable measure of risk. Japan did not agree to use the permanent increase of 3,000t as the most reasonable measure of risk;
- (iv) Australia and New Zealand noted that the absolute level of the recovery probability under their weighting schemes was low under current catches and the EFP catch scenarios considered;
- (v) Australia and New Zealand noted that in the past several years the projections have been overly optimistic and expressed concern that the present results could also be overly optimistic. Japan noted that the comparison of projections in previous year was also influenced by change in the assessment methods used and that the results should not be considered to reflect the change of overall estimate of risk.

Each party used the results of these analyses to provide detailed answers to the questions posed by the Commission to the Scientific Committee, and these answers are contained in the report.

#### Other matters

- a) The ERS report was passed through the Scientific Committee to the Commission;
- b) The Scientific Committee provided a proposal for sampling and archiving of otoliths, as requested by Commission (Attachment 9 of the report);
- c) The data and document exchange prior to meeting was not implemented perfectly but it was useful, and it should be continued and improved. Some suggest improvements are:
  - (i) an extra week be allowed for document writing;
  - (ii) agreed mechanism of exchange be identified.

During his presentation, but not as part of the Scientific report, Dr Sainsbury noted that party catches in 1995 and used in the 1996 assessment did not include the 711t of non-retained fish, thought to have later died, as reported by Japan to the 1996 Commission meeting.

#### 9.1.2 Japanese Statement

Japan made the following statement:

Japan expressed its regret and concern that the results of two VPAs presented to the Scientific Committee were not fully comparable. One reason for this was that the cross-validation process for Japan's VPA was not completed. Japan assured the Commission that it will continue efforts to pursue this issue. However, the other reason was that the newly introduced factors by Australia could not be incorporated into Japanese VPA during the limited time available at the Committee. In order to prevent this from happening again in the future, Japan proposed that newly implemented inputs and/or structures would only be adopted as common methods after thorough reviews of one year by all parties.

It was noted that this was an agreed rule in the ICCAT and that the CCSBT/SC also had applied the same rule when changing the interpretation regarding growth.

Japan also argued against the use of overly conservative measures in risk assessment. Utilisation of natural resources is always associated with some risks in stock status. It is rather important and productive to take appropriate action promptly when an adverse signal is recognised. It regarded the estimation of risk from a permanent additional catch scenario as neither appropriate nor realistic for measuring the risk of an experimental fishing program where the immediate reduction of catch level was considered as possible action whenever necessary. Excessive conservatism of not accepting any additional risk under any circumstance will be adverse for the achievement of maximum sustainable use of resources which is clearly stipulated, in Japan's view, in the CCSBT Convention.

#### 9.1.3 New Zealand Statement

New Zealand made the following statement:

- a) There is a mix of positive and negative signals. CPUE is similar to that seen in the mid 1980's;
- b) CPUE of juveniles is still a hopeful sign at present but presents equivocal signals. There are some sightings of small fish off New South Wales and New Zealand not seen for many years. However, these hopeful signs are few and there is little evidence that the higher abundance of juveniles in recent years is contributing appreciably to the parental stock (8+ year olds);
- c) The SBT parental stock based on CPUE and VPA appears to have stabilised at about 25-28% of the 1980 levels over the past 2-3 years, this is about 6% of the abundance in 1960 (the fishery started in about 1952);
- d) Stock projections have been found to have been overly optimistic for the past several years, suggesting that the stock is worse off than has been previously believed. Given this, the projected probability of recovery for the parental biomass to 1980 levels is worrying since it is only 29% and the probability that the parental stock will stay the same or decline is 57%. Current parental biomass is likely to be 5-8% of what it was in the first decade of the fishery. These estimates are also likely to be optimistic;
- e) Preliminary data from 1996 generally show a worsening of CPUE trends for juvenile and adults off South Africa, the Tasman Sea off Australia and in the New Zealand EEZ;

f) In summary, the SBT stock continues to show a mixture of signs but there is little or no evidence that the parental stock is rebuilding as a result of the stronger than average year classes of the late 1980s and quota restrictions. The parental stock continues at very low levels and the probability of parental biomass levels recovering to 1980s levels by 2020 is low, the probability that the parental stock will remain at its current low level or decline further is moderate (57%).

#### 9.1.4 Australian Statement

Australia made the following statement:

- a) The use of the historical conversion factor for going from processed to whole weight will result, and has resulted in, the total weight of the longline catch being underestimated;
- b) The results of the collaborative juvenile tagging program provided significant and improved information on natural and fishing mortality rates for young fish and this tended to give a more optimistic estimate of recent recruitment than if this information is not used. Expansion of the tagging program to the high seas and across a wider range of age classes could provide the best approach for reducing the uncertainty in the present assessment;
- c) The Scientific Committee developed a proposal for collection and archiving of hard parts which Australian scientists consider extremely important for the Commission to implement;
- d) The Scientific Committee agreed that the recent catch rate data for NZ and Tasmania suggests a reduced abundance of young age groups in these areas in the last few years. Concerns exist that the high catch rates of juveniles for late 1980 and early 1990 cohorts has declined rapidly as these cohorts aged;
- e) Uncertainty associated with Japanese high seas non-retention and the changes in non-retention practices introduced in 1995 have increased and will continue to increase the uncertainty in the assessments particularly with respect to recent recruitment trends;
- f) The 1995 parental biomass is considerably lower than the 1980 level and the continued low level is a cause for serious concern because the 1980 level corresponds to commonly used thresholds for biologically safe parental biomass;
- g) The Scientific Committee failed to agree on the range of uncertainty that needed to be considered (i.e. step 1). In particular, Japan's weighted VPA and projection results were based on only 10% of the 216 VPA's agreed on by the Scientific Committee - 90% were excluded because Japan considered these to be outside the range of plausible hypotheses while all other groups consider them to be within the range of plausible hypotheses;
- h) For the 10% of the agreed on VPA's that Japan considered to be within the

plausible range of hypotheses, projection results were highly sensitive to slight technical differences in the VPA models. Based on the results produced by Japan with the Japanese weightings, the estimated probability. of recovery by 2020 was 20%. Results produced by Australia, based on a slightly different technical model but for the same basic set of VPA's and Japanese weighting's, yield a probability of 79%. This sensitivity is largely due to the specific VPA model and the sensitivity indicates that the set of VPA's given high weights by Japan (and thus their projection results) do not provide a robust measure of the status of the SBT resource;

i) Interpretations of the current status of the stock range from significant rebuilding of juveniles that will soon lead to increases in the parental biomass through to interpretations that weaker and uneven rebuilding of juveniles will lead to further declines in parental biomass under current catches. Given the range of uncertainty, neither interpretation can be excluded. After weighting the various interpretations, Australian scientists consider that the expected outcome under current catches is continued low parental biomass. At present there is no clear scientific basis for definitive conclusions about the sustainability of current catch levels.

#### Agenda Item 10: Research and Monitoring Programs

#### 10.1 Implementation of Article 8 (1) of the Convention, Data Collection

The Commission agreed on the data collection and exchange program at Attachment O and agreed that this program would apply in future years unless otherwise agreed.

The Commission agreed that proposals for the collection and management of data relating to Southern Bluefin Tuna be developed for consideration by the Commission by:

- a) the Secretariat assisting the Scientific Committee by undertaking an analysis of data collection arrangements in relevant international organisations and the costs to those organisations. The Secretariat should confine its work to looking at existing arrangements in relevant international organisations. The Secretariat should also propose policies necessary to ensure confidentially of information;
- b) requesting the next Scientific Committee meeting to examine the:
  - (i) nature and character of data, statistics and information to be collected (eg. catch/effort data, size, estimated age, tagging, Real Time Monitoring Programme (RTMP), recruitment, monitoring and research data);
  - (ii) appropriate methods of compilation and management etc;
  - (iii) required facilities and equipment such as Personal Computer, hard disc, software;
  - (iv) required manpower;
  - (v) estimated cost of the proposals; and

## c) recognising that more work may be needed through other channels intersessionally.

New Zealand and Australia acknowledged the functions described in the Convention regarding data collection but considered that this role could be undertaken at a range of levels and stressed that a decision had yet to be taken on the role of the Secretariat in data collection and storage. New Zealand considered the highest priority should be accorded to the collection and provision of data to the Scientific Committee.

Japan considered the role of data collection by the Secretariat to be obligatory and important as there will be a need for the Secretariat to respond to the requests for information from other organisations.

#### 10.2 Implementation of Article 8 (9) of the Convention, Monitoring

The Commission agreed that the Compliance Committee develop a report and recommendations for action on implementing Article 8 (9) for the next Commission meeting. Australia and New Zealand noted that the implementation of vessel monitoring programmes was a critical issue for the Commission and should be accorded high priority.

Japan reported that in the last year it had increased efforts in monitoring high seas fishing operations. All parties confirmed that Terms of Reference for the Compliance Committee should abide by the Convention and international law.

The Commission was encouraged that Taiwan had implemented real time reporting by VMS.

New Zealand reported that as from October 1997, it would be implementing an expanded Vessel Monitoring System (VMS) in its Exclusive Economic Zone. The implementation of VMS programmes offered the potential for savings and efficiencies in the collection of real time catch and monitoring information.

#### 10.3 Collaborative Research Programmes

Japan made a presentation on collaborative research programmes between Japan and Australia for information purposes.

Japan and Australia started a five year collaborative research program in 1988 for the purpose of monitoring SBT recruitment by fishery independent methods. This program was followed by the second five year program from 1993 involving aerial survey, tagging, and other projects. Some of the results of these programmes had been reported at the Scientific Committee and their usefulness was recognised by the Committee. Japan had also submitted an application for a survey, to be started from January 1997 by R/V Shoyo Maru of the Fisheries Agency, in SBT spawning areas within the Australian 200 mile zone. Japan requested the understanding and cooperation from Australia on this project.

Australia said that it supported the Shoyo Maru project and emphasised the importance of continuation of these collaborative programmes. The Commission encouraged Japan and Australia to maintain and extend the collaborative research program on recruitment monitoring.

Australia requested the Commission to adopt the otolith sampling and archiving proposal from the Scientific Committee. Australia proposed that the otolith archiving should be conducted by the CCSBT Secretariat. Japan expressed its support for both proposals on the condition that details of the proposals should be discussed in an appropriate manner, that sampling and archiving should not be controlled by a particular member, and that the projects should not interfere with commercial fishing operations. **The Commission agreed that all parties should proceed with otolith sampling taking the above matters into consideration.** 

#### 10.4 Conversion Factors

#### The Commission noted that a collaborative analysis on conversion factors had been undertaken by scientists of the three countries.

New Zealand noted that the results of that work that the applications of the currently used conversion factors was resulting in the underestimation of catch.

Ideally the Commission would like to move towards a situation where the parties were using the same accurate conversion factors, but there are management implications which make this difficult at this time, and some implications for the scientific assessment which need to be addressed.

Japan requested further investigation of appropriate conversion factors and noted that since the current TAC had been calculated on current conversion factors, adjustment should be made to increase the TAC if the conversion factor in the Scientific Committee report was deemed appropriate for use by the Commission.

#### Agenda Item 11: Global Total Allowable Catch and Quota Allocation

Japan proposed to increase the current Global Total Allowable Catch (TAC) by at least 3,000 metric tonnes for the next fishing season stating the following reasons:

- a) Since the TAC for the SBT fisheries has been restricted at 11,750 metric tonnes since 1989, the closure of the fisheries is becoming earlier and earlier in the recent years because of possible increases of the SBT CPUE;
- b) Recruitments of all the year classes after 1987 have been kept at higher levels than those of the early 1980s;
- c) Most of the VPA runs clearly indicated the increase of the parental biomass in the recent years;
- d) Retrials of the Japanese VPAs and projections, referred in the Report of the

Scientific Committee, also indicated clear signs of the recovery of the SBT stocks.

New Zealand did not believe a TAC increase was appropriate and supported this view with the following points:

- a) the parental stock continues to be substantially less than 1980 parental biomass levels which corresponds to commonly used thresholds for biologically safe parental biomass;
- b) there is little or no evidence that the parental stock is rebuilding and in fact there is a reasonable probability of decline in the near future;
- c) significant uncertainties in the assessment create real difficulties for the managers.

New Zealand suggested that serious consideration will need to be given to catch reductions in the near future if the outlook in the assessment does not improve.

Australia had different views from Japan's on the condition and probability of the recovery of the SBT stocks. It expressed concerns regarding low parental biomass and the sensitivity of all projections to increase in catch, perceived low abundance of 3 to 4 year SBT, and substantially lower probabilities of the stock recovery under the catch scenario of permanent increase of 3,000 metric tonnes per year. Consequently, Australia considered there was no justification for the proposed increase of the TAC. Australia reminded the Commission that historically the stock projections had been shown to be overly optimistic.

#### No decision on TAC was made at this time.

The Commission noted that its decisions shall be taken by a unanimous vote of the parties at the Commission meeting.

Australia and New Zealand expressed their concern that they would soon be in the position of having to determine their national catch limits for 1996-97. They stated that, in the absence of a decision being reached by that time, they would abide by the national allocations agreed for 1995-96 as if they were still in force.

Australia and New Zealand stressed that this was a much less acceptable situation to them than reaching a consensus decision in the Commission. All sides committed to resolving the important matters of TAC, national allocation, the proposal to implement a pilot programme and the question of future action on ERS, at the resumed third Annual meeting of the CCSBT to be held as soon as possible.

#### Agenda Item 12: Establishment of Future Quota Allocation Mechanism

Japan tabled a proposal for a future quota allocation mechanism (**Attachment P**) in accordance with the agreement reached at the Second Special Meeting of the CCSBT. The proposal followed the provisions of Article 8.4 of the CCSBT Convention and assigned certain weights on the criteria to be considered in deciding allocations. Japan

stressed that the current allocation system was inappropriate because no consideration was given to the possibility of new entrants while the Commission was promoting non-members to join the CCSBT. Japan considered that the system was also inappropriate because no consideration was given to the historical catch records of the members, fishing capacities of the members, and social and economic dependence of their fishing industry on the SBT fisheries.

Australia and New Zealand stated that they would like more time for studying the proposal in detail before discussing it. In the meantime the existing understanding should prevail.

#### The Commission decided to discuss this matter at the next Annual Meeting.

#### Agenda Item 13: Management Strategy

Australia proposed that the Commission develop a management strategy. The process in which the strategy would be developed is at **Attachment Q**.

New Zealand welcomed Australia's proposal and suggested that elements which could be included in the draft included research planning, information management and data handling. Furthermore, New Zealand reported that management strategies which had been developed in collaboration with sector groups, including industry, had been successful.

New Zealand and Australia maintained that given the current status of the SBT stock, the degree of uncertainty in the assessment and the recent listing of SBT as critically endangered on the IUCN Red List of Threatened Animals, the development of a management strategy was an issue of high priority and should be developed as a matter of urgency. They felt it was essential that the Commission be seen to be acting responsibly and that the development of a visible and transparent mechanism to rebuild the SBT stock was an essential component of this task.

New Zealand noted that until the Commission is able to agree on the broad management directions, the Commission would have some difficulty addressing or agreeing to many of the lower level management issues which it faces.

Japan felt there was no need to develop a management strategy because the Commission already had the long-term objective of rebuilding the parental biomass to the 1980 level of biomass by the year 2020.

Australia indicated its intention to prepare and circulate a revised paper on management strategy. Japan did not consider this work to be high priority and further noted that even if Japan responds to the Australian proposal, it could not commit to responding within the eight week timeframe proposed by Australia. The decision on convening a management strategy workshop was left open to be resolved no later than the resumed Third Annual Meeting.

#### Agenda Item 14: Experimental Fishing, including Pilot Program

Japan made a presentation on a *Joint Pilot Program (JPP) for Experimental Fishing Program (EFP) for SBT* (CCSBT/SC/96/33) (Attachment R) which was submitted to the 1996 CCSBT Scientific Committee in accordance with the Agreed Timetable for Evaluation and Development of an Experimental Fishing Program (the Second Special Meeting of the CCSBT, May 1996) but never discussed at the Committee. Comments received from New Zealand and Australia shortly after the Scientific Committee are at Attachments S and T.

Japan said the objective of the JPP is to conduct a feasibility study on the full scale EFP for the purpose of obtaining information about necessary area and time coverage, necessary amount of samples, and other basic factors of the EFP. Japan believes that the JPP would also provide valuable information to resolve the uncertainty surrounding the CPUE hypotheses by obtaining data from the areas and time lacking recent commercial fishing data.

Japan proposed that Part I of the JPP, which would attempt to reproduce the past commercial fishing operation patterns, would be conducted in the fourth quarter of 1996 (October to December) in the CCSBT areas 7 and 8. Two options for the method of the deployment of fishing vessels were presented, on which Japan requested to have discussions at a workshop.

The intended sample size for the Part I is up to 1,500 metric tonnes, on which Japan also would like to have scientific discussions at the workshop. Part II of the JPP was based on an Australian EFP proposal submitted at the Shimizu Workshop on EFP in May - June 1996. Japan reiterated its proposal for a workshop to be held immediately after the Commission meeting to have more detailed discussions on the implementation of the JPP.

New Zealand and Australia could not endorse Japan's proposal at this time. They noted that for the Commission to make an informed and defensible decision on the implementation of either a full or pilot EFP or proceed with step 3, steps 1 and 2 of the schedule of activities to consider experimental fishing had to be completed and the result considered by the Commission.

New Zealand maintained that experimental fishing was one of a number of measures which could be undertaken to reduce uncertainty in the stock assessment. It felt that the benefits of undertaking an EFP should clearly outweigh the additional risk which additional catches resulting from an EFP would pose to the potential recovery of the stock. In May the parties had agreed that any increase in catch recommended above the current TAC to accommodate experimental fishing should not jeopardise the potential recovery of the parental stock to the 1980 level by 2020, or undermine other agreed management objectives. They recognised the potential benefits of an EFP that had agreed objectives and that was appropriately designed and monitored. New Zealand also stated that the JPP should be conducted within the current limit of TAC as it had concerns regarding the present condition of SBT stocks. They emphasised the importance of completing the steps defined by the timetable before the consideration

and implementation of the JPP.

Australia also regarded the additional removal from the SBT stock unacceptable in view of the results of the stock assessment presented at the Scientific Committee. It referred to the Australian comments on the JPP, dated 12 September 1996, and stated that a number of questions should be answered regarding the design and scale of the Program on the basis of the Objectives and Principles compiled at the Second Special Meeting of the CCSBT. Australia noted that steps 1 and 2 had not been completed, so it was not possible to evaluate the risks associated with an EFP.

Specifically, Australia didn't believe the proposed time coverage of the JPP (October to December) would contribute to the resolution of uncertainties in the CPUE interpretation. Australia also noted that the recovery probability of the SBT to the 1980 level by 2020 would be substantially reduced under all projection scenarios except the one involving an increase of 3,000t for 3 years followed by a decrease for 3 years of 3,000t below the current TAC.

Japan responded that the timetable was agreed among the parties after difficult discussions and concessions and, therefore, it was the responsibility of the CCSBT to fulfil the agreement. In this regard, Japan expressed strong frustration on the lack of progress in this matter and requested a clear decision by the Commission. Australia and New Zealand did not agree with this statement.

Japan also stated that the removal of 1,500 metric tonnes would in its estimation reduce the recovery probability by only 0.5%, which was well within the range of standard error and therefore negligible. The areas (7 and 8) and period (October to December) were specifically selected in order to obtain maximum information for the reduction of the differences in the CPUE models. Therefore, Japan emphasised that parts of Step 1 and Step 2 had already been completed as far as the JPP was concerned.

In addition, Japan stated that the implementation of the Joint Pilot Program would contribute to the design of the full scale EFP and was thus necessary for the completion of the steps defined in the Timetable.

Japan stressed the importance of immediate implementation of the Joint Pilot Program, while it questioned whether other members had no intention to agree on the implementation of the Program under any circumstances. New Zealand and Australia responded that they were willing to consider the implementation of an EFP or Pilot Program following the completion of all the steps agreed by the parties. The completion of these steps would enable the Commission to make a decision on action to take to resolve the most important areas of uncertainty through an integrated program of work.

#### Agenda Item 15: Rules of Procedure for the Scientific Committee (including Agenda Item 16: Policy on Employment of External Scientists and Other Experts)

Issues arising in the conduct of this year's Scientific Committee Meeting were discussed. The Chair prepared a list of issues to be resolved and noted that to effectively deal with the list of issues (**Attachment U**) more time than was available at this Commission meeting would be needed. She invited delegations to notify her later if there were any additional issues they wished to be added to the list.

Issues raised under the agenda item relating to policy on employment of external scientists was incorporated into this item.

It was agreed that a small workshop would be held involving senior managers and scientists of the parties to resolve the issues as listed. Resolution of the details of the meeting was deferred until the resumed third Annual Meeting of the Commission.

#### Agenda Item 16: Terms of Reference for the Compliance Committee

Revised draft Terms of Reference for the Standing Committee on Compliance were tabled (Attachment V). Japan said that it was unable to agree to the terms of reference at this meeting as they needed to be referred to its Government for consideration. It was agreed that Australia would Chair this Committee for the next two years and, together with the Secretariat, would seek agreement to the Terms of Reference through diplomatic channels prior to the meeting of the committee which will be held in conjunction with the Fourth Annual Meeting.

#### Agenda Item 17: Program of Work for 1996-97

17.1 Arrangements between CCSBT, other States and Entities

#### 17.1.1 Indonesia, Korea and Taiwan

The Chair invited the non member observers to comment on how their respective countries/entities may best be encouraged to join the CCSBT or to cooperate with its management arrangements.

The Korean delegation already explained its position at its opening statement. In addition, the Korean delegation will recommend to the Korean Government dispatching of a scientific observer to the Scientific Committee of CCSBT and providing catch data for CCSBT.

Taiwan's observer noted Taiwan's rights to join regional management regimes under the UN Agreement on Highly Migratory Fish Stocks and Straddling Fish Stocks.

The Indonesian observer noted that it was working towards developing an accurate data base of information on SBT catches by Indonesia. The Indonesian observer indicated that the Indonesian Embassy in Canberra would be prepared to assist in directing any inquires the Commission may have to the Indonesian Government.

The Indonesian observer advised that Indonesia was still making efforts to improve data collection on Southern Bluefin Tuna to assist in fisheries management. The Indonesian government was also still considering its position on membership of the CCSBT, however, the efforts being made by the CCSBT members to manage the fishery were

acknowledged.

#### 17.1.2 Other Non-Members

Consideration on this matter was deferred.

17.2 Scientific Workshops17.3 Other workshops17.4 Meeting of the Scientific Committee

These items were discussed under Agenda Item 19.3: Closure of the Meeting.

17.5 Meeting/s of the Commission

The timing of the Commission Meeting is reported under Agenda Item 19.3: Closure of the Meeting. However, **agreement was reached on Standing Committees as follows:** 

- a) The Chair outlined the agreements to establish:
  - (i) a Standing Committee for Compliance, and
  - (ii) a Standing Committee for Finance and Administration,

as well as revisions to the draft terms of reference of the Compliance Committee. It was agreed that the Committees would be formed and would usually meet immediately prior to the main plenary of the CCSBT, in parallel. A shorter plenary would deal with the substance of reports prepared by the Committees and other important matters. The committees were to be chaired by Australia and Japan respectively for the first two years.

Japan noted that it would need to consider the terms of reference for the Compliance Committee in Japan and that it still regarded the ERS as a working group, not a Standing Committee, as it was not as important as finance and administration and compliance.

New Zealand was strongly of the view that the ERS group should be a Standing Committee and noted its concern at the implications of giving these issues low importance. Australia concurred with this view, and indicated that in its view seabird bycatch and ERS were very high priorities regardless of the terminology used to describe the ERS committee.

#### Agenda Item 18: Other Business

#### Non Retention of Small Fish

It was agreed that whatever policies are adopted by national fleets in regard to the non retention of fish, parties should encourage all of their fleets to operate consistently with their policies.

#### Agenda Item 19: Close of the Meeting

19.1 Election of Chair and Vice Chair of 1996-97

The meeting did not close, therefore the elections did not occur.

19.2 Adoption of the Report of the Meeting

## The meeting approved and adopted the report of this first session of the Third Annual Meeting

#### 19.3 Closure of the Meeting

The Commission agreed to adjourn this meeting.

The Commission agreed to a programme for data collection and exchange for the annual stock assessment which would be followed in 1997 and future years unless varied by agreement. On this basis it was agreed that the Scientific Committee would be held from 28 July to 8 August 1997. The Commission also agreed that, subject to confirmation, the Fourth Annual Commission Meeting would be held from 8 to 13 September 1997. The Commission agreed to the set of questions to be addressed by the 1997 Scientific Committee Meeting at Attachment W.

It was also agreed that:

- a) the Third Annual Meeting would be resumed as soon as possible at a later date;
- b) each country would undertake the work required to complete steps 1 and 2, and when all parties agreed that the necessary preparatory work had been done, they will hold a workshop on steps 1 and 2;
- c) a workshop would be held on step 3-experimental design;
- d) a meeting of the Working Group on Ecologically Related Species would be held;
- e) a workshop on Management Strategy would be held;
- f) a workshop to improve the Scientific Committee process, based on the issues at Attachment U, would also be held.

However, the timing and priorities for a) to f) had yet to be agreed and it was not clear if all could be held before the next Annual Meeting.

Signed Chair of the Commission

Dr Alison Turner 28 September 1996 Note: In Agenda Item 5.4.2, "reaching 650 tonnes by September 1996 was amended from "reaching 650 in 1995" at the Resumed Third Annual Meeting.

#### List of Attachments

Attachment A Agenda

- B List of Participants
- C Japan's opening statement
- D New Zealand's opening statement
- E Australia's opening statement
- F Draft 1997 Budget
- G Japanese fishery Review
- H Japanese SBT import statistics
- I NZ Fisheries Review
- J Australian Fisheries Review
- K Taiwan's Fisheries Review
- L Australian Industry Paper on Individual Transferable Quota's
- M Kyoto Declaration Paper
- N 1996 Report of the Scientific Committee
- O Data Collection and Exchange Program
- P Proposal on Future Quota Allocation
- Q Proposal on Management Strategy
- R Joint Pilot Program Proposal
- S Comments by Australia on Joint Pilot Program
- T Comments by New Zealand on Joint Pilot Program
- U List of Procedure and Process Issues for the Scientific Committee
- V Revised Draft Terms of Reference for Compliance Committee
- W Question for Scientists for 1997

#### Attachment A

#### Agenda

- 1. Opening of Meeting
  - 1.1 Welcoming Address
  - 1.2 Meeting Arrangements
  - 1.3 Appointment of Rapporteurs
  - 1.4 Adoption of Agenda
- 2. Opening Statements
  - 2.1 Japan
  - 2.2 New Zealand
  - 2.3 Australia
  - 2.4 Other States and Entities
- Relation to other Bodies
   Cites including action by IUCN relating to the listing of SBT
   IOTC
   ICCAT
   CCAMLR (Observer at CCAMLR Meeting 21 October 1 November)
- 4. Administrative Arrangements
  - 4.1 Appointment of Executive Secretary
  - 4.2 Review of 1996 Budget, Draft 1997 Budget
  - 4.3 Amendment to Staff Regulations Relating to Social Security Contributions
  - 4.4 Adoption of Headquarters Agreement
- 5. Review of SBT Fisheries
  - 5.1 Japan
  - 5.2 New Zealand
  - 5.3 Australia
  - 5.4 Other States and Entities
  - 5.5 High Seas SBT Fishery ITQ System
- 6. FAO Coordinating Working Party on Statistics
- 7. Matter Arising from Previous Meeting CCSBT Position on Kyoto Declaration and Other International Fishing Initiatives
- 8. Ecologically Related Species Report from the Ecologically Related Species Working Group
- 9. Report from Scientific Committee
  - 9.1 Status of SBT Stocks
  - 9.2 Uncertainty in the SBT Stock Assessment
  - 9.3 Experimental Fishing

- 10. Research and Monitoring Programs
  10.1 Implementation of Article 8(1) of the Convention, Data Collection
  10.2 Implementation of Article 8(9) of the Convention, Monitoring
  10.3 Collaborative Research Programmes
  10.4 Conversion Factors
- 11. Global Total Allowable Catch and Quota Allocation11.1 Global Quota11.2 National Allocations
- 12. Establishment of Future Quota Allocation Mechanism
- 13. Management Strategy
- 14. Experimental Fishing, including Pilot Program
- 15. Rules of Procedure for the Scientific Committee (including Policy on Employment of External Scientists and Other Experts)
- 16. Terms of Reference for the Compliance Committee
- 17. Program of Work for 1996-97
  - 17.1 Arrangements between CCSBT, other States and Entities
    - 17.1.1 Indonesia, Korea and Taiwan
    - 17.1.2 Other Non-Members
  - 17.2 Scientific Workshops
  - 17.3 Other Workshops
  - 17.4 Meeting of the Scientific Committee
  - 17.5 Meeting/s of the Commission
- 18. Other Business
- 19. Close of the Meeting19.1 Election of Chair and Vice Chair for 1996-9719.2 Adoption of the Report of the Meeting19.3 Closure of the Meeting

#### Attachment B

### List of Participants

Dr Alison TURNER	<b>Chair</b> First Assistant Secretary Petroleum and Fisheries Division Department of Primary Industries and Energy
Delegation Ms Mary HARWOOD	Australia Assistant Secretary Fisheries and Aquaculture Branch Department of Primary Industries and Energy <i>(Head of Delegation)</i>
Mr Neil HERMES	Acting Director International Relations Section Department of Primary Industries and Energy
Mr Martin EXEL	General Manager Fisheries Australian Fisheries Management Authority
Government Experts and Advise Mr Nick RAYNS	rs Manager SBT and Western Tuna Fisheries Australian Fisheries Management Authority
Ms Joan LEARY	Management Officer SBT and Western Tuna Fisheries Australian Fisheries Management Authority
Mr Peter NEAVE	Management Officer South East Fishery Australian Fisheries Management Authority
Mr Peter CASSELLS	Assistant Director International Relations Section Fisheries and Aquaculture Branch Department of Primary Industries and Energy
Mr Anthony PIGOUNIS	International Relations Section Fisheries and Aquaculture Branch Department of Primary Industries and Energy
Mr Peter McLOUGHLIN	Prime Minister and Cabinet
Mr Matthew FARRER	Prime Minister and Cabinet
---	---
Dr Derek STAPLES	Director Fisheries Resources Branch Bureau of Resource Sciences
Ms Jean CHESSON	Bureau of Resource Sciences
Mr Albert CATON	Tuna Biologist Bureau of Resource Sciences
Dr Keith SAINSBURY	Program Leader Pelagic Fisheries Resources Program Division of Fisheries CSIRO
Mr Tom POLACHECK	CSIRO
Mr Andrew McNEE	Director Wildlife and Marine Management Section Australian Nature Conservation Agency
Ms Kerry TRUELOVE	Wildlife and Marine Management Section Australian Nature Conservation Agency
Mr Neil HUGHES	Department of the Environment, Sport and Territories
Mr Andrew SERDY	Sea Law and Ocean Policy Group The Legal Office Department of Foreign Affairs and Trade
Ms Karen WHITHAM	Treasury Department
Mr Stephen ROWLEY	Department of Finance
Mr Rosalie BALKIN	Attorney-General's Department
Non-government Experts and Mr Glenn SANT	d Advisers TRAFFIC Oceania
Mr Brian JEFFRIESS	President Tuna Boat Owners Association of Australia
Mr Greg HONEYCHURCH	Tuna Boat Owners Association of Australia
Mr Mario VALCIC	Tuna Boat Owners Association of Australia

Mr Joe PUGLISI	Tuna Boat Owners Association of Australia					
Delegation	Japan					
Mr Minoru MORIMOTO	Councillor Oceanic Fisheries Department Fisheries Agency ( <i>Head of Delegation</i> )					
Mr Masayuki KOMATSU	Deputy Director Far Seas Fisheries Division Fisheries Agency					
Mr Kazuhiko UTSUMI	Deputy Director Marine Resources Division Fisheries Agency					
Mr Joji MORISHITA	Deputy Director International Affairs Division Oceanic Fisheries Department Fisheries Agency					
Mr Hiroshi TAKENOI	Far Seas Fisheries Division Fisheries Agency					
Dr Sachiko TSUJI	Chief Scientist Temperate Tuna Research Group National Research Institute of Far Sears Fisheries Fisheries Agency					
Dr Yoshio ISHITSUKA	Chief Research Planning & Coordination Section National Research Institute of Far Seas Fisheries Fisheries Agency					
Ms Naoko HAMAGUCHI	Fisheries Division Ministry of Foreign Affairs					
Mr Kenro IINO	Councillor Embassy of Japan					
Mr Michio IIDA	Councillor Embassy of Japan					
Advisers to the Delegation Mr Tsutomu WATANABE	Federation of Japan Tuna Fisheries Cooperative Assn.					
Mr Yuji KAWAI	Federation of Japan Tuna Fisheries Cooperative Assn.					

Mr Keigo HARADA	Federation of Japan Tuna Fishe	eries Cooperative Assn.
-----------------	--------------------------------	-------------------------

- Mr Nozomu MIURA Federation of Japan Tuna Fisheries Cooperative Assn.
- Mr Kiichiro YOROZUYA Federation of Japan Tuna Fisheries Cooperative Assn.
- Mr Shinroku SASAKI Federation of Japan Tuna Fisheries Cooperative Assn.

Mr Yoshikatsu HATAKEYAMA Federation of Japan Tuna Fisheries Cooperative Assn.

- Mr Kanetsugu NISHIKAWA Federation of Japan Tuna Fisheries Cooperative Assn.
- Mr Hirotaka INOUE Federation of Japan Tuna Fisheries Cooperative Assn.
- Mr Hiroshi HANEDA Federation of Japan Tuna Fisheries Cooperative Assn.
- Mr Masateru TSURUMOTO National Ocean Tuna Fisheries Association
- Mr Hiroaki YAMAMOTO National Ocean Tuna Fisheries Association
- Ms Michiyo STARK SAKAMOTO Interpreter

Delegation

#### **New Zealand**

Mr Mark EDWARDS	Policy Manager Head Office Ministry of Fisheries ( <i>Head of Delegation</i> )
Mr Arthur HORE	Policy Manager Auckland Ministry of Fisheries
Ms Lee ROBINSON	Policy Analyst Head Office Ministry of Fisheries
Dr Talbot MURRAY	Programme Director Pelagic Fisheries National Institute of Water and Atmospheric Research
Ms Lisa FUTSCHEK	Policy Officer Economics Division Ministry of Foreign Affairs and Trade

Non-government Experts and Advisers

Mr Andrew BRANSON	Chief Scientist New Zealand Fishing Industry Board
Mr Jonny SINAGA	<b>Indonesian Observer</b> Third Secretary of Political Section Embassy of the Republic of Indonesia
	Korean Observers
Leader Mr Bong Ryull YANG	Counsellor Embassy of the Republic of Korea
Representative Mr Joon Suk KANG	Deputy Director International Organisation Division Ministry of Maritime Affairs and Fisheries
Mr Cheng-Fei HUANG	<b>Taiwan Observer</b> Chief of Marine Fisheries Division Fisheries Department Council of Agriculture
Mr Alejandro ANGANUZZI	<b>Food &amp; Agriculture Organisation,</b> <b>Indian Ocean Tuna Commission, and</b> <b>Indo-Pacific Tuna Program Observer</b> Project Coordinator of Tuna Management and Tuna Development Projects in the Indian and Pacific Oceans
Mr Campbell McGREGOR	<b>CCSBT Secretariat</b> Acting Executive Secretary
Ms Maree TOOHEY	Business Manager
Ms Kozue LOGHEM	Administrative Officer
Ms Saemi BABA	Interpreters
Ms Kumi KOIKE	

#### Attachment C

## Third Annual Meeting of the Commission for the Conservation of Southern Bluefin Tuna

#### **Opening Statement by Japan**

Mr Chairman, Country Representatives and Observers,

At the outset of the 3rd Annual Meeting of CCSBT, I would like to say a few words.

At this 3rd Annual Meeting of the CCSBT, I consider that it is time for the CCSBT to demonstrate to the international community the usefulness and effectiveness of its work as a responsible regional fisheries organisation by following the Convention. To be specific, the Commission is required, firstly, to evaluate the present status and project future trends of the SBT stock on the basis of the best available data, secondly, to establish and implement appropriate conservation, management, and optimal utilisation measures, and lastly, to manage its activities openly and equitably by complying with established rules.

However, based on the review of the current situation of the CCSBT, I deeply regret that the CCSBT has not fulfilled its responsibility as a regional fisheries organisation.

As you are aware, scientists from Australia, Japan and New Zealand are at an impasse where they have not yet been able to present agreed views on the evaluation of the current status and projection of the future trends of the stock despite their long history of studies on the SBT stock. This makes the discussion on the conservation and management measures by the Commission difficult. To find a way out from this difficult situation, Japan proposed an Experimental Fishing Program (EFP) at the last annual meeting for the purpose of solving the uncertainties on the stock assessment and facilitating the scientific discussions.

Japan proposed to discuss two items, Total Allowable Catch (TAC) recommendation and EFP including the Pilot Program at this year's annual meeting of the Scientific Committee held in Hobart. With regard to the TAC recommendation, which is the Commission's fundamental function stipulated in Article 9.2 (d) of the Convention, it was concerned that having no discussion on this issue would lead the Scientific Committee to neglect its responsibilities. Therefore, Japan regrets that no discussion was conducted at the Scientific Committee meeting because of the shortage of time although an agenda item was established for the issue. However, judging from information presented at the Scientific Committee meeting, Japan is convinced that it is becoming clearer that the recent trend of the SBT stock indicates its recovery and the a fixed additional catch will hardly affect the stock recovery. Therefore, Japan will propose to increase TAC at this annual meeting again as it had in the last meeting.

With regard to the Pilot Program, it has been scheduled to make a decision for its implementation at this annual meeting based on the timetable agreed at the Special Meeting in May this year. Japan proposed to include this item to the agenda of the

Scientific Committee meeting as it was indispensable for the Commission to have scientific advice from the Scientific Committee to make a decision. However, as you are aware, the Scientific Committee was concluded without any discussion on this issue as the other parties opposed Japan's proposal, insisting that the agenda was already full and time for the discussion about the Pilot Program was not available. Japan strongly regrets that the failure to follow the timetable for EFP agreed at the Special Meeting in May this year and to give necessary scientific advice to this annual meeting of the Commission would jeopardise the international credibility of the CCSBT. As the total of three Special Meetings have been held since last year and the work has been continued also through the workshops regarding this issue, it is necessary to maintain and develop this momentum, and overcome this impasse with regard to the stock assessment and projection of future trends. Considering these points, Japan proposed to hold a workshop on this issue immediately before or after this annual meeting for the implementation of the agreed timetable after the conclusion of this year's annual meeting of the Scientific Committee. Regretfully, all parties could not support the workshop to be held before this meeting. Therefore, Japan urges the CCSBT to agree on the proposal to hold the workshop at the earliest possible time after this meeting. With regard to the comments received on the Pilot Program presented at the Scientific Committee meeting, I would like to discuss them in detail under relevant agenda items.

Japan also deeply regrets that this year's Scientific Committee meeting failed to adopt an agreed report to the Commission. One of the reasons for that was that there were different views between parties on such procedures as report preparation and decision making by the Scientific Committee. To fulfil its effectiveness and responsibilities as a regional fishery organisation, Japan believes it is essential for the CCSBT to establish open and equitable rules of procedure for the Scientific Committee to rectify and improve the past practices established in the Trilateral Scientific Meeting before the establishment of the CCSBT Convention. Therefore, with regard to the current discussion on the rules of procedure for the Scientific Committee, Japan is prepared to review the current proposal with these views in mind and make additional suggestions when necessary. Japan appreciates the efforts of scientists who had continued to work on the report through correspondence and have succeeded in finalising it .

The UN Straddling Fish Stocks and Highly Migratory Fish Stocks Agreement was developed last year. The First Meeting of the Interim Scientific Committee for Tuna and Tuna-Like Species in the North Pacific Ocean was held this spring and the Indian Ocean Tuna Commission will begin its operation on a full-scale in this December. In addition, the SPF Meeting which was held recently endorsed the convening of the Second Multilateral High-Level Conference on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific in the beginning of next year. These show that the global activities on tuna stock management are becoming more progressive. The public interest in the management of marine living resources is increasing through ratification of the UNCLOS in Japan. In these circumstances, Japan is willing to make its best efforts for the CCSBT to achieve its mission as a responsible regional fishery organisation.

Finally, I would like to welcome the representatives from non-parties and international organisations attending as observers who are interested in conservation, management

and optimum utilisation of the SBT stock. I also would like to extend congratulations for the establishment of the Secretariat and the opening of its office recently, and express my appreciation to the Australian Government for its efforts to establish the Secretariat and hold this annual meeting.

In concluding my opening remarks, I hope this week's discussion will have many fruitful outcomes.

#### Attachment D

#### Opening Statement for New Zealand Third Annual Meeting of the CCSBT 23-27 September 1996

Over the last fifteen years of cooperation, New Zealand, Australia and Japan have realised some significant achievements. We have built a solid foundation for continuing collaboration. The Convention document provides a robust and comprehensive framework-we have a well developed working relationship-and crucially, we have jointly taken management action which averted likely stock collapse.

There are also positive elements to our recent work. To date all parties have shown a willingness to work through issues on which we have different views. Consequently, three additional Commission meetings were held to consider the issue of experimental fishing and the setting of a TAC. We were able to establish a process, with an agreed set of principles and objectives, to evaluate experimental fishing as a mechanism to address uncertainty in the stock assessment.

As part of that process, a number of technical workshops were held, all of which have usefully improved our understanding of the factors contributing to the uncertainty in the assessment. The scientists now have a better understanding of the models the respective parties use, are have made some progress towards using an agreed base case as part of the assessment.

However, we have also expended a lot of time in meetings since and including the last Commission meeting-three special meetings, four workshops and one Scientific Committee meeting-by my calculation, nearly ten weeks. Although each of these meetings made progress, particularly the workshops, I think we would agree that we would like to have achieved more with that expenditure of time and resources.

There is a considerable amount of work yet to be done in addressing a number of the important issues the Commission faces. New Zealand believes we have a responsibility to agree what those issues are and their priority and then design a collaborative process to work toward their resolution.

New Zealand suggests that the most important of the problems and external threats which we must resolve include:

- $\Box$  stock status
- □ scientific process
- □ uncertainty
- □ accession of further parties
- □ international credibility
- no management strategy

#### **Stock Status**

Although there is a disparity of views over stock projections - all parties agree that the stock is less than 8% of the 1960 level of parental biomass and that the stock is less than 39% of the 1980 level of parental biomass. The conclusion we reach is that the parental biomass is severely depleted and that recent recruitment has yet to affect significant rebuild.

Recent biomass levels are clearly far from optimal - harvests for our industries must be restrained far below their potential; there is uncertainty about the security of these levels - recruitment is unstable and may decline due to uncontrollable environmental factors. Our primary focus must be to be sure that we are taking positive action to rebuild the parental biomass.

#### **Scientific Process**

It is evident that the last scientific meeting used much of its valuable and limited time debating issues of procedure and administration. To some degree this seems to have been caused by inadequate guidance from the managers and a very full work programme. Rather than re-litigate all the disagreement that is evident in the report - I believe we have to accept that there are different views on the stock projections - and we need to discuss carefully with our scientists the best way to make rapid progress towards a closer resolution. We also need to identify the real issues behind the procedural and administrative problems - and fix them so that the future meetings can get on with the science.

#### Uncertainty

The utility of the current assessment to managers is severely constrained by the disparity between the groups of scientists at the meeting. In past meetings, and again in the recent scientific committee, they have identified a number of sources of uncertainty that contribute to this disparity. There is real urgency to agree to a programme to resolve these sources of uncertainty, as this situation is deteriorating rather than improving. Experimental fishing may form one component of this programme - but in isolation it will not resolve all, or even necessarily the most important sources of uncertainty.

#### **Accession of Further Parties**

The CCSBT cannot achieve its objective of ensuring the conservation and optimal utilisation of SBT while catches taken outside the arrangement are significant and unrestrained. NZ supports an active dialogue with potential entrants in the arrangement to ascertain their intentions and discuss with them steps to see them accede or co-operate with the Convention in the near future.

#### **International Credibility**

We have been aware that other organisations and governments around the world watch take considerable interest in the stock and our actions or inaction. In October, southern bluefin tuna will very publicly be listed as 'critically endangered' by IUCN - one of the world's largest and most influential conservation organisations. Although the listing has no immediate management implications - clearly it will draw attention on SBT and criticism in some quarters - at worst this listing could potentially be used as the basis for a listing with CITES-which would impact significantly on our industries and the operation of this arrangement. In order to address criticism we need to be seen to have credible and responsible management body - this leads directly into the final point -

We have no agreed management strategy - we believe this is fundamental to resolving many of the other issues we are grappling - if we do not have at least a level of shared understanding on our objectives - we will flounder when trying to agree on specific management actions.

Very real threats need to be addressed to assure the future of the stock and confirm the competence of the Commission. New Zealand's objective for these discussions is to return home with a report and an agreed work programme formulated to maximise the use of our joint resources to address the key issues faced by the Commission. To achieve this the New Zealand delegation will attempt to communicate clearly our views, but also make every effort to understand the perspective of other parties - we look forward to working with the parties and the chair to achieve these objectives over the next five days.

## 2.3 AUSTRALIAN OPENING STATEMENT

I would like to welcome all delegations to the third annual meeting of the Commission and also to welcome the representatives from non-member countries and international organisations.

Australia noted that this is the first meeting of the Commission which has enjoyed the support of the new Secretariat, and I would like to acknowledge the Acting Executive Secretary and his staff for their excellent organisation for the conduct of this meeting.

Australia remains completely committed to the successful operation of this Commission, and through that, to effective international management of the southern bluefin tuna fishery.

It is clear that the Commission is at a crucial point in its development and all of us have a special duty of care to see that we can together chart a path towards recovery and sustainable production from this valuable fishery.

The long-term well-being of the resource and the SBT fishing industries in each of our countries depends on the way we work together this week and beyond.

I have to say at the outset that Australia is extremely concerned at the events of the last four weeks. It is regrettable that those who have sought wholesale change to the established and practicable scientific processes of the Commission have been willing to demand such change at the expense of the comprehensive stock assessment which is so vital to the functioning of this Commission and to the management decisions we are all required to make.

From Australia's point of view, the credibility, competence and calibre of the Commission are at stake. It is time for the Commission to embrace sound standards of fisheries management in a way which genuinely reflects the uncertainties in the stock assessment and the current status of SBT stocks.

There may be differences of view on various aspects of the stock assessment, but the fact remains that the SBT stock is depleted to levels far below the 'safe' 1980 level of parental biomass and to levels which represent an alarmingly small proportion of virgin biomass.

Australia is keen to explore ways for the parties to together address the current difficulties facing the commission. Several factors are important in this regard. firstly, the integrity of the Commission's scientific work must be assured, producing assessments which can stand up to international scrutiny. There needs to be clear separation of the scientific and management processes.

A crucial issue for this meeting is whether additional removals will jeopardise stock recovery. We all agreed in may that additional catch, even for experimental fishing, would only be contemplated if it could be shown not to jeopardise stock recovery. We obviously have substantial discussions ahead of us, but I should register clearly at this point Australia's commitment to maintaining a responsible management framework around the fishery which is capable of providing for stock recovery to safe and sustainable levels.

Our job as managers in this Commission is to identify the best way to deal with differences and uncertainties, to strengthen the co-operative framework which we have together built over the last 15 years. There may be challenging times ahead, but we are confident that all parties are equal to the task and can together secure to secure a healthy future for all of our SBT industries.

#### BUDGET FOR THE COMMISSION FOR THE CONSERVATION OF SOUTHERN BLUEFIN TUNA FOR 1997

INCOME Contributions from members Japan Australia New Zealand	247,314 221,763 <u>67,023</u>	536,100	
Staff Assessment Levy Interest on investments TOTAL GROSS INCOME		13,000 15,000	564,100
EXPENDITURE			
ANNUAL MEETING of CCSBT			
Interpreter Costs Hire of venue Hire of equipment General catering Additional support staff Interpretation of documents Publications		17,000 3,000 1,000 500 700 5,000 5,000	32,200
Supplemental Commission Meetings Hire of venue, interpreters and other support			32,000
SCIENTIFIC COMMITTEE			
Hire of venue Interpretation Hire of equipment Support Staff		4,500 24,000 1,000 1,000	
Additional Sub committees/ workshops	-	18,000	48,500
SECRETARIAT COSTS			
Executive Secretary Deputy Executive Secretary Staff Assessment Levy Office Assistance Temp Staff or Expert Consultants Employer Super/ Social security Worker's Compensation/ travel/ contents insuarance Travel/transport - O/seas - Domestic	40,000 10,000	80,000 60,000 45,000 30,000 35,000 6,000	
Overseas Recruitment Coasts and Annual Provisions         Overseas recruitment; travel etc         Initial cost of overseas appointment - travel, relocation allowance, transport of effects         Annuel contribution for overseas appointment - development and travels	20,000 16,000	5,000	
home leave allowance, repatriation grant and removal costs	20,000	56,000	402,000
MANAGEMENT OF OFFICE			
Office lease Office running costs - electricity - cleaning - body corporate fees - equip maintenance - hire other equipment - nbrocopy costs	1,400 2,000 1,000 3,000 3,000 4,000	30,000	
Stationery Provision for replacement of assets Telephone/communications Miscellaneous	<u> </u>	10,000 10,000 5,000 10,000	49,400

#### Attachment G

#### **Review of SBT Fisheries --- Japan**

1 1995 Fishing Season (1.3.95 - 28.2.96)

(1) Fishing period, number of vessels, catch by area was coordinated in order to utilise the Japanese national quota of 6 065 metric tonnes efficiently. The total accumulated number and the real number of far seas longline fishing vessels targeted SBT was approximately 240\* and 200\*\*, respectively. The total catch was 5 866 metric tonnes. (\* Simple summation of the number of vessels by area, \*\* Actual number of vessels operated, without double or multiple counting)

(2) The 1995 fishing operations for SBT were closed as of November 10, when the final setting of longline was made. The Japanese SBT fishing operations utilising Australian quota set aside for Japan were conducted outside of the standard fishing period and continued until the end of February, 1996. All the vessels operated in the high seas participated in the RTMP (Real Time Monitoring Program; to report catch and other fishing information every day by fax)

(3) For the purpose of contributing to the increase of the SBT stocks, the fishing industry released, as a voluntary measure, a juvenile fish smaller than 25 kg on the high seas when the fish was alive at the time of retrieval. A vessel with a scientific observer on board would retain the juvenile fish in order to collect data representative of the total population.

Quota management was conducted by adding estimated weight of released fish presumed dead after the release to the catch weight. The mortality rate of the released fish was estimated by the information from fishing vessels with scientific observers and the past RTMP data.

(4) With regard to the Australian quota of 650 metric tonnes set aside for Japan, 471.5 metric tonnes was caught in the high seas outside of the standard Japanese fishing period, leaving 178.5 metric tonnes unused.

Although the fishing vessels made efforts to utilise the quota fully and effectively, those vessels chose to go back to Japan over the end of the year following the general custom of the Japanese fishing vessels.

2. 1996 Fishing Season (1.3.96 - 29.2.97)

(1) Fishing period, number of vessels, catch by area was adjusted downward in the 1996 fishing season. The Japanese longliners will not operate in the NZ 200 mile waters in this season because the main fishing period had already passed before the conclusion of the access negotiation with New Zealand. The access negotiation was delayed due to the delay of decisions on a TAC and its national allocations at the CCSBT to May 1996.

(2) The Japanese fishing industry is continuing to release a live juvenile fish smaller than 25 kg on a voluntary basis in order to contribute to the increase of SBT stocks.

## Attachment H

# Import of SBT

fresh and frozen

(Unit: MT)

	1995	1996 (Jan-Jul)
Total	5,210	2,794
Australia	3,273	1,690
Taiwan	1,276	619
Indonesia	208	167
New Zealand	203	72
Honduras	147	3
Korea	76	221
Others	27	22

Data: Monthly Trade Statistics Report

#### Attachment I

#### **Review of SBT Fisheries - New Zealand**

We last had the opportunity to review the New Zealand SBT fishery at the Commission meeting in Tokyo. Since that time, there have been a number of changes in the fishery, but overall, many of the trends we have seen develop over the last few years have continued.

Historically, southern bluefin in our zone were taken by Japanese foreign licensed vessels. There was very little domestic catch capacity or activity. Since 1989 this trend has reversed, with increasing effort by domestic industry; a trend which continued in 1996.

This season, 50-60 domestic operators were active in the fishery and caught SBT. The majority of these vessels are small owner operated ventures which catch less than three tonnes. They operate close to their home port, and supply the fresh SBT markets in Japan.

In addition to the small operators, there are several medium to large domestic longline vessels, and some of those have freezer capacity. The introduction of larger domestic vessels with an increased catching capacity, has meant that both the areas and the seasons fished for SBT has increased.

Whereas once our domestic SBT season was predominantly in the winter months of June to August, the season now extends from April to September. Some SBT are caught throughout the year.

Unlike the expanding pattern seen in the domestic fishery, the areas fished for SBT by Japanese vessels have contracted since the early 1980s, as have the length of the season and catch rates throughout the zone. Considerably less fishing occurs in the areas of former importance such as the east coasts of the North and South Island. This has occurred despite the fact that these were the areas in which historically the larger, more valuable fish were taken.

In recent years catch rates have declined in all but a few small areas. Consequently, both the domestic and Japanese vessels have focused their efforts in relatively small areas where they can maintain reasonable catch rates. This includes areas off Westland on the South Island, and the East Cape of the North Island where the average size of fish is smaller.

Although juveniles are still appearing in our catches, there has been a sharp decline in the CPUE for juveniles between 1994 and 1995. Whereas once we had hoped that the increased abundance of juveniles would contribute to the rebuilding of the parental stock, we now believe it is most likely that the juvenile portion of the stock in the New Zealand Exclusive Economic Zone (EEZ) is being fished down and will contribute little to the parental biomass.

With respect to our total catches for 1994-95 fishing year, despite the New Zealand fishery being closed in August rather than September, New Zealand overcaught its catch limit by 15.2 tonnes.

In recognition of our international obligation to respect New Zealand's 420 tonne catch limit, the Government determined and our domestic fishers, unanimously agreed to reduce the catch limit for the current year by the amount overcaught in the previous year. Therefore, this season, our catch limit has been reduced to 404 tonnes. Furthermore, in an effort to prevent overcatch in future years, mechanisms to more closely monitor in-season catch have been put in place with the full cooperation of our industry.

This season, overcatch will not be an issue for our fishers. In 1996 the domestic fishery has experienced very poor catches. Catch rates are half those for 1995. This has occurred despite increased catching capacity and effort in the domestic fleet. Coupled with the decreased catch rates, other factors have also contributing significantly to the lower total catch. These include:-

- lower market prices;
- increased Government cost-recovery charges; and,
- the late cancellation of charter vessel arrangements.

All of these factors mean that the New Zealand total catch is likely to be less than 135 tonnes this season. These figures will be verified over the next few months, and we hope will advise the Commission at a later date.

#### Attachment J

#### **Review of Australia's SBT Fisheries-1996**

Surface fisheries off WA have ceased. Efforts to expand the small troll fishery off Tasmania (based on 12-25 kg SBT) have been unsuccessful and it failed in 1996. SA surface fishery operations on small juveniles were reduced to about 1440 t by 1992/93. With joint venture cessation in the latter part of 1995, only about 1300 t were taken by joint venture in the 1994/95 season. Domestic surface fishing activities increased in the 1995/96 season (it was still in progress) to more than 4000 t, mainly by purse seining for cage-rearing but also by poling for fresh-chill exports.

Sporadic reports of surface sightings of small juvenile SBT off NSW in the early 1990s suggested that some increased presence might be developing, but this did not eventuate despite the reduced surface activities in Western Australia and South Australia. However in August 1996 there were reports of appearance of schools of small juvenile (5-10 kg, ie 1+) SBT in the traditional NSW pole fishery area and at the time when such fish appeared seasonally. Further searching operations may occur, as the quota year does not end until 15 December 1996 (it commenced on 16 December 1995 because the 1994/95 quota year completion date was extended from 30 October to 15 December 1995).

Successive annual decreases in representations of younger SBT in winter season longline catches off Tasmania occurred after 1992 and are of concern. In 1996, decreases of 2, 3, 4, and 5-year olds were evident. The report in 1996 of 1+ SBT in the Sydney region offers some optimism. On the other hand the decreased representation of the four young cohorts in the longline catch must be regarded as a possible indication of a decline in SBT recruitment after 1990.

## **REVIEW OF SBT FISHERIES - TAIWAN**

## I. The Fishery and the Catches

Taiwan's high sea longline fishery commenced in the mid 1950s in the northern and eastern Indian Ocean, and then expanded to the other oceans. The main target species at that time was albacore. During the late 60s and the early 70s, the main catch was yellowfin tuna. From the mid 1980s, some longliners started to catch higher commercial value species by using vessels equipped with super freezers. Apart from bigeye and yellowfin tuna, southern bluefin tuna (SBT) is now one of the most important high-valued species.

After 1993, Taiwan's SBT landings were estimated based on the sales records and the certified weight reports of Shin Nippon Kentai Kaisha, the New Japan Surveyors and Sworn Measures Association (NJSSMA). SBT landings were estimated as 1,003 tons in 1994 and 1,447 tons in 1995, most of which were caught in the Indian Ocean (85% in 1994 and 90% in 1995, respectively).

In accordance to the recommendation made in the second CCSBT meeting, Taiwan will maintain the further year's catches at 1,447 tons, which is the same level as 1995. An official announcement has already been made in the beginning of 1996 to fulfil this purpose.

## **II.** The Catch Statistics

Logbooks of Taiwan's high sea tuna fishery were collected by the Fisheries Department, Reconstruction Bureau, Kaohsiung Municipal Government (FDKMG), and were compiled by the Institute of Oceanography, National Taiwan University. But from July 1996, the compilation of the catch statistics are to be made by the Overseas Fisheries Development Council of the Republic of China (OFDC), a nonprofit organisation with funds endowed by both the Government and the fishery industries.

The catches of SBT were reported as bluefin tuna before 1994 and the item of SBT was not used in the logbooks until the end of 1994. The catch statistics of SBT will be available in the logbooks submitted since 1995.

From 1996, based on the official announcement, every vessel that has caught SBT is required to report their catches in weight and fishing ground to FDKMG, and this information will then be passed to the Fisheries Department of the Council of Agriculture(FDCOA), the federal fishery authority, and the OFDC for controlling the total catch of SBT. This information will be compiled together with the logbooks submitted after their trips.

#### **III.** Number of Vessels and Fishing Locations

SBT was caught not only by vessels categorised as deep longliners but also by those categorised as regular longliners. In 1994, 41 vessels landed more than 10 tons of SBT, increasing to 49 in 1995. Up to July 1996, 68 vessels reportedly engaged in the catching of SBT, but the number of vessels that caught more than 10 tons of SBT was still low.

Fig. 1 (overleaf) shows the fishing grounds from the daily reports of the 68 vessels from January to early August 1996. Most of the fishing activities took place on the waters between 30 to 40 degrees south and in the Indian Ocean. According to the available logbook data, the distribution profiles of 1994 and 1995 were similar with that of 1996. Most locations that have SBT catch in 1996 also had catch in 1994 and 1995.



Fig. 1 Fishing locations from the daily report of Taiwanese longliners from January to the early August of 1996

#### 1994 TAIWAN SBT VESSELS AND LANDINGS

Unit = number of vessel

			SBT Landings (tonne)												
		-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-15	15-20	20-	Total
	Base	29	6	4	3	1	4	1	4	0	1	6	5	6	70
sels	Super freezers	12	6	2	1	1	1	0	0	1	0	5	5	5	39
/es	Don't no	10	1	1	1	1	0	0	0	0	0	1	4	4	23
-	Total	51	13	7	5	3	5	1	4	1	1	12	14	15	132

#### 1995 TAIWAN SBT VESSELS AND LANDINGS

Unit = number of vessel

			SBT Landings (tonne)												
		-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-15	15-20	20-	Total
vessels	Base	21	2	2	4	3	3	3	3	4	2	5	5	18	75
	Super freezers	33	4	7	4	1	3	2	6	1	1	9	8	4	83
	Total	54	6	9	8	4	6	5	9	5	3	14	13	22	158

## Attachment L

## Australian Industry Presentation on ITQ System

#### **Current Facts**

- 1. Individual Transferable Quota (ITQ) System:
  - exists for SBT in Australia
  - applies to most species in New Zealand
  - being introduced in some inshore fisheries in Japan.
- 2. SBT fishing is a global migratory resource but:
  - catching structure is still by country
    eg Japan does not have the opportunity to participate in farming.
- 3. Japan catches its quota in a short time each year
  - surrendering the SBT fishing ground to other countries; and
  - perhaps not maximising the value of the catch.
- 4. Some countries have excess catching capacity
  - with no automatic system like ITQs to rationalise effort.

#### **Optimum Utilisation of SBT Resource**

Our experience is that ITQ's are the best way to achieve the optimum utilisation of the resource.

#### Advantage of ITQ's

- 1. It would make the SBT fishing a truly international one
  - eg Japan is not able to participate in tuna farming and other ways of optimum utilisation of resource
  - with ITQ's, Japan fishermen could farm their own quota in Australia and have total control over it.
- 2. ITQ's give the fishermen ownership of the resource
  - and creates the incentive to conserve the resource.
- 3. It provides much greater stability for fishing operations and crews.
- 4. Fishermen can fish at the optimum time and catch and market the best fish.

- 5. It would create a more unified research effort because the ownership of the benefits would be clearer.
- 6. It would considerably improve relationships between governments and industry.
- 7. ITQ's can be used for borrowing capital.
- 8. It reduces the over-capitalisation in vessels which can be a waste.
- 9. It would assist with solving the variable squares problem
  - both in area and times.

#### Disadvantages

Clearly there can be short-term problems

- eg restructuring costs, but
  - (i) at some stage restructuring must take place
    - (eg in Australia in 1984 we had to restructure somehow and ITQ's was the best way.)
  - (ii) the speed of restructuring can be controlled by the rules.

## Attachment M

## **CCSBT** Position on Kyoto Declaration and Other International Fishing Initiatives

#### Purpose

1. Commission to consider an approach it may adopt in relation to instruments such as the Kyoto Declaration and other international fishing initiatives, in accordance with a request by the Commission at the last meeting.

## Background

2. The Second special meeting of the Commission in Canberra in April 1996 decided that the Secretariat should prepare a paper outlining an approach for the Commission to adopt in terms of its position on instruments such as the Kyoto Declaration and other international fishing initiatives. The following information has been prepared in consultation with the Office of International Law, Commonwealth Attorney-General's Department.

#### Consideration

- 3. The CCSBT has been established by the Convention for the Conservation of Southern Bluefin Tuna (SBT Convention) in accordance with the principles set out in UNCLOS (Article 64) as an international organisation through which coastal States and other States whose members nationals fish in the region for southern bluefin tuna can cooperate to ensure, through appropriate management, the conservation and optimum utilisation of Southern Bluefin Tuna throughout the region, both within and beyond exclusive economic or fishing zones. The CCSBT also has obligations in regard to ecologically related species.
- 4. The ability of the CCSBT to give effect to, and participate in other international conventions and initiatives depends upon:
  - (a) its own powers and responsibilities under the SBT Convention;
  - (b) the views of the parties to the SBT Convention; and
  - (c) provisions of the other relevant international instrument or initiative which is sought to be applied or in which participation is sought.

These issues are canvassed in more detail overleaf.

- 5. The SBT Convention does contain provisions relevant to the relationship between the Convention (including the CCSBT) and other international treaties and initiatives. Article 4 provides that neither the SBT Convention nor measures adopted under it prejudice the positions or views of any Party with respect to its rights or obligations under treaties and international instruments to which it is a party or its position or views with respect to the law of the sea. Thus parties to the SBT Convention are free to maintain a view on their obligations under other treaties unrestricted by the SBT Convention. Nevertheless, the views of the parties to the SBT Convention are likely to influence any decision taken by the CCSBT in relation to its application of, or participation in any other treaty or international instrument. Each party exercising voting rights on the CCSBT will contribute its interpretation and views on those other international conventions and initiatives.
- 6. Also, there are a number of provisions of the SBT Convention which contemplate the involvement of the CCSBT with other international organisations and initiatives. Article 6.9 gives the Commission such legal capacity as is necessary to enjoy its relations with other international organisations. Article 12 provides for the CCSBT to collaborate with other inter-governmental organisations which have related objectives. It also provides that the Commission may make arrangements with such inter-governmental organisations. Article 14 enables the Commission to invite other inter-governmental organisations to send observers to the meeting of the Commission.
- 7. The ability of the CCSBT to co-operate with other international organisations and to be involved in other treaties also is dependent upon the grounds for participation set out in those other international initiatives. For example, the 1995 Agreement relating to the Conservation and the Management of Straddling Fish Stocks and Highly Migratory Fish Stocks does provide for ratification and accession by certain international organisations, such as the European Union. However, it is unlikely that it provides for the CCSBT to become a party. Nevertheless, the operation of that Convention is very much dependent on the existence of regional fisheries management organisations such as the CCSBT. Furthermore, Article 44 of that Agreement provides that it does not alter the rights and obligations which arise from other compatible agreements. Those other agreements would include the SBT Convention.
- 8. It would generally be the case that the CCSBT would have a limited opportunity to become a party to another binding international agreement or treaty. This, in part, is because very few other international conventions would provide for membership by the CCSBT. However, the CCSBT would still have a role. First, the actions of the CCSBT could be one means by which its members could implement their obligations under those other Conventions. (The CCSBT would, of course, only be able to act on those obligations if they were consistent with the provisions of the SBT Convention). Secondly, there would be scope for the CCSBT to enter into bilateral arrangements with other international organisations established by those Conventions in order to assist it in carrying out its functions under the SBT Convention.

- 9. There are other international instruments in the form of guidelines or recommendations which the CCSBT may wish to apply. The application of these is voluntary. One example is the Code of Conduct for Responsible Fisheries which provides a broad framework of fisheries conservation, management and development which is intended to apply to the widest range of entities associated with fisheries. The CCSBT could decide that it would undertake its functions and responsibilities in accordance with the relevant provisions of the Code.
- 10. Similarly, the Kyoto Declaration is a form of political commitment by the participating parties to implement a plan of action either directly or in co-operation with, for example, other appropriate inter-governmental organisations. A number of actions in the Declaration relate to the activities of the CCSBT and members could decide to exercise CCSBT powers and responsibilities available under the SBT Convention, consistent with the Kyoto Declaration, noting that the primary obligation to implement the Declaration rests with the participating parties. Again the relevant part of the Kyoto Declaration could only be implemented to the extent that it was consistent with the powers and responsibilities under the SBT Convention.
- 11. There is also the question of the ability of the CCSBT to participate in international meetings relating to fisheries management, including meetings of other international organisations. Those other international organisations may well have provision for the participation by observers such as the CCSBT, similar to that contained in Article 14 of the SBT Convention itself. Most international meetings now allow for participation by observers including international organisations, though frequently that participation is on a more limited basis than that allowed to countries.
- 12. In summary, the ability of the CCSBT to apply other international instruments and to participate in other international initiatives will depend upon the application of the provisions of the SBT Convention, the views of the parties to the SBT Convention and on the provisions for participation established by the other particular international convention or initiative.

#### Recommendations

- 13. That members of the Commission advise the Secretariat of relevant intergovernmental and other international organisations with which they are associated;
- 14. That the Secretariat identify other inter-governmental or international organisations and international instruments which could affect the conservation and management of southern bluefin tuna;
- 15. That the Secretariat report to the Commission on the relevant organisations and international instruments which could affect the conservation and management of southern bluefin tuna and include recommendations on whether the Commission should:

- (a) take no action,
- (b) monitor activities of the organisation,
- (c) seek to collaborate with the organisation, which could include data exchange and inviting observers to Commission meetings,
- (d) seek to enter into formal arrangements with the organisation, or
- (e) adopt all or part of the provisions of relevant international instruments.

Attachment N

Commission for the Conservation of Southern Bluefin Tuna



みなみまぐろ保存委員会

# Report of the Second Scientific Committee Meeting

26 August – 5 September 1996 Hobart, Australia

#### Attachment O

## **Data Collection and Exchange Programme**

#### Data Provision

1. All parties shall provide 100% of the previous year's catch, effort, size composition and other agreed information relevant to the SBT stock assessment at a level of aggregation (ie area and time) sufficient to facilitate effective stock assessment and in a manner which guarantees confidentiality to the data providers. All data shall be provided to the CCSBT secretariat for provision to the parties.

Current arrangements for data provision to parties are:

- catch by month and by 5X5 degree square by gear type;
- effort expressed as number of hooks for the longline fishery an number of days (operating and searching) for surface fisheries at the same resolution applied to the catch data; and
- catch in number by 1cm size interval at the same resolution applied to the catch data where possible.
- 2. Catch at age matrix and the magnitude and age composition of the non-party catch will be calculated at an appropriate temporal and spatial resolution.
- 3. All parties shall provide the following data, other information and documents not later than the indicated times:

		Scientific Committee
-	all data described in 1	12 weeks before
-	all derived data described in 2	11 weeks before
-	standardised CPUE and a description	6 weeks before
-	brief description of intended changes to VPAs	4 weeks before
-	key documents	1 week before
-	list of all documents for meeting	1 week before

Japan noted that for at least the 1997 SBT stock assessment that the earliest the data could be provided was by the end of April. Given the timetable above this would mean that the earliest that the Scientific Committee could meet would be the third week in July. In 1997 the Scientific Committee could be held during 28 July - 8 August and that would imply a Commission meeting starting about 8 September.

3. As deadlines approach, the CCSBT Secretariat should remind the parties as to the deadlines agreed above. The secretariat should provide a report to the Commission on the progress against the timetable and on any issues arising from the implementation of the timetable above.

#### Other Data Issues

It is necessary to distinguish the above mentioned procedures and requirements relating to data provision required to conduct the regular stock assessment process from those below relating to the collection and exchange of detailed data required for additional research supporting stock assessments.

The situation with existing detailed data (RTMP and fine scale data) is as follows:

Originally all data collected under the RTMP was shared among the scientists of the parties. However, in 1995 Japan expanded the RTMP to cover the whole fleet. These data therefore became equivalent to fine scale data for the entire fleet which under Japanese government policy cannot be released to parties under confidentiality requirements. Therefore since 1995, the RTMP data released by Japan were the season's data from vessels on which observers were present at some time during the fishing season. Japan has agreed to continue the same level of data provision to the scientists of all parties. Australia provides all RTMP data from bilateral and JV vessels fishing within the AFZ. New Zealand provides all RTMP data for SBT fleets within their EEZ.

All countries have made fine scale data for their SBT fishery available to the scientists of all parties as long as all analyses are done collaboratively in the country where data are held. This practice will continue at present.

Attachment P 26 September 1996

## Proposal

## A FUTURE QUOTA ALLOCATION MECHANISM FOR PARTIES IN ACCORDANCE WITH THE PROVISIONS OF THE CONVENTION

- 1. Preamble
- 2. Relevant provisions of the Convention
- 3. Interpretation of the provisions and weighting for each factor
- 4. Example from other international fishery organisations
- 5. Guidelines which should be adopted for the future

## 1. Preamble

Japan stressed as reflected in the report of the CCSBT Second Special meeting held from 29 April to 3 May 1996 that the Commission should establish a new mechanism for future national quota allocation in accordance with the provisions of the Convention. It is recorded that Australia and New Zealand agreed to Japan's request to review the current understanding of future national allocation at the 1996 Annual Meeting. Against this background, this proposal is to suggest the national quota allocation which is considered the most appropriate and fair when considering the interpretation of the provisions of the Convention and the other international organisation's customs.

2. Relevant provisions of the Convention

Article 8.4 of the CCSBT Convention is as follows;

- (a) relevant scientific evidence;
- (b) the need for orderly and sustainable development of southern bluefin tuna fisheries;
- (c) the interests of Parties through whose exclusive economic or fishery zones southern bluefin tuna migrates;
- (d) the interests of Parties whose vessels engaged in fishing for southern bluefin tuna including those which have historically engaged in such fishing and those which have southern bluefin tuna fisheries under development;
- (e) the contribution of each Party to conservation and enhancement of, and scientific research on southern bluefin tuna;
- (f) any other factors which the Commission deems appropriate.
- 3. Interpretation and weighting of the factors which need to be considered under Article 8.4 of the Convention
  - (1) the factors that need to be considered are:
    - (a) relevant scientific evidence;

The issues that need to be considered specifically are:

- the flexibility of each Party's fishing industry to achieve MSY.
- assessment of the contribution of each Party's fishing industry in ensuring parental stocks at desirable levels.

- (b) the need for orderly and sustainable development of southern bluefin tuna fisheries;
  - current scale of fishing industry (numbers of fishing vessels, fishers, and the regions depending on this fishery).
  - the social and economic backgrounds which make the sustainable development of fisheries possible.
- (c) the interests of coastal States through whose fishery zones southern bluefin tuna migrates;
  - the existence of spawning area of southern bluefin tuna and juvenile's feeding area at each coastal State.
  - size of fishery zone of the coastal State.
- (d) the interests of Parties whose vessels engaged in SBT fishing (including those which have historically engaged in such fishing and those which have southern bluefin tuna fisheries under development);
  - the historical fishing record needs to be considered and accumulated retrospectively to the earliest year assessed for the stock assessment. (proceeding 1960).
  - the catch caught by the Parties' vessels should be assessed as its own catch record even if they were engaged in joint ventures.
  - the interests of Parties under development (new Party etc.) must not undermine the interests of the current Parties.
- (e) the contribution to conservation, enhancement and scientific research;
  - Conservation
  - the contribution of the current Parties should be considered on an equal basis. The future catch record for the new Party should be adjusted considering the efforts which the current Parties have made to the conservation and management actions.
  - the time the Parties' industries have spent in industry to industry cooperation and their scientific contributions should be assessed.

- Enhancement
- the time the Parties have spent and their scientific contribution should be assessed.
- Research
- priority should be given to the assessment of the Party which has presented catch and effort data used for the scientific stock assessment.
- efforts to assist in identifying the solution of stock assessment uncertainties should be assessed.
- (2) Weighting of the factors to be considered.

There is no specific provision in the Convention.

4. Example from other international fishery organisations.

The following is the criteria and weighting scheme for the catch allocation in the Northwest Atlantic Fisheries Organisation (NAFO) which consists of many Parties and has a stock conservation management record covering a long period.

- (1) The criteria for the allocation covers
  - (a) Parties interests;
  - (b) Historical catch record;
  - (c) Parties' degree of dependence on the coastal community;
  - (d) Cooperation in monitoring and inspection;
  - (e) Cooperation in stock conservation.
- (2) Weighting

•	Each Party's catch record for the previous 20 years	40%
•	Each Party's catch record for the previous 5 years	40%
•	Interests of the coastal States	10%
•	New Parties or others	10%

# 5. The guidelines which should be adopted for future allocations.

			Japan	Aust.	NZ	Total	
(a)	Scientific evidence	*1 (5%)	1.7% (35.0)	1.5% (30.0)	1.8% (35.0)	5.0% (100.0)	
(b)	need for sustainable development *2	(5%)	4.3% (85.0)	0.7% (13.7)	0.0% (1.2)	5.0% (100.0)	
(c)	interests of coastal States *3	(20.%)	0.0% (0.0)	18.0% (90.0)	2.0% (10.0)	20.0% (100.0)	
(d)	interests of Parties engaged in SBT fish (historical record) *	(60%) ning 4 vervation	46.7% (77.9)	13.2% (22.0)	0.1% (0.1)	60.0% (100.0)	
(0)	enhancement and re	search *5 (10%)	5.8% (57.8)	3.1% (30.8)	1.1% (11.4)	10.0% (100.0)	
Total	popriate national quota	(100%)	58.5% ↓ 6 874MT	36.5% ↓ 4 289MT	5.0% ↓ 587MT	100.0% ↓ 11 750MT	
uppi	printe national quota		0.07 1011	1.209141	5071011	11.7501411	
(Note	e)						
			Japan	Aust.	NZ	Total	
*1	Scientific evidence		35.0%	30.0%	35.0%	100.0%	
*2	Need for sustainable	development	85.0%	13.8%	1.2%	100.0%	
	<ul><li>Fishery scale</li><li>Social economical</li></ul>	50% background 50%	(80.0%) (90.0%)	(18.0%) (9.5%)	(2.0%) (0.5%)	(100.0%) (100.0%)	
*3	Interests of coastal sta	ates	0.0%	90.0%	10.0%	100.0%	
*4	Historical record (catch record since 19	77.9%	22.0%	0.1%	100.0%		
*5	Contribution rate of C Enhancement and Re	Conservation, search	57.8%	30.8%	11.1%	100.0%	
	• conservation: 3	3.3%	(33.3%)	(33.3%)	(33.3%)	(100.0%)	
	• enhancement: 3	3.3%	(60.0%)	(40.0%)	(0.0%)	(100.0%)	
	• research: 3	3.3%	(80.0%)	(19.0%)	(1.0%)	(100.0%)	
## Catch in Weight (whole weight: MT)

				Australia		NZ			
	Year	Japan	Domestic	JV	Subtotal	Domestic	JV	Subtotal	Total
	1951		37		37				37
	1952	565	264		264				829
Ĺ	1953	3890	509		509				4399
Ĺ	1954	2447	424		424				2871
	1955	1964	322		322				2286
Ĺ	1956	9603	964		964				10567
Ĺ	1957	22908	1264		1264				24172
Ĺ	1958	12462	2322		2322				14784
L	1959	61892	2486		2486				64378
L	1960	75826	3545		3545				79371
L	1961	77927	3678		3678				81605
L	1962	40397	4635		4635				45032
L	1963	59724	6199		6199				65923
L	1964	42838	6832		6832				49670
L	1965	40689	6876		6876				47565
L	1966	39644	8008		8008				47652
L	1967	59281	6357		6357				65638
L	1968	49657	8737		8737				58394
L	1969	49769	8679		8679				58448
L	1970	40929	7097		7097				48026
L	1971	38149	6969		6969				45118
L	1972	39458	12397		12397				51855
L	1973	31225	9890		9890				41115
L	1974	34005	12672	!	12672				46677
L	1975	24134	8833	!	8833				32967
L	1976	34099	8383	!	8383				42482
L	1977	29600	12569		12569				42169
L	1978	23632	12190		12190				35822
L	1979	27828	10/83		10/83	100		120	38611
F	1980	33633	15942	]	11195	130		130	44978
L	1981	2/981	15845		15845	1/3		1/3	43997
L	1982	20789	21501		21501	505		305	42393
F	1985	24881	1/695	]	1/695	132		132	42708
F	1984	25528	13411	]	15411	93		93	30832 22070
F	1985	20390	12589	]	12589	94		94	33079
F	1980	15182	12551		12551	82		82	27795
╞	1987	13904	10821		10821	37		37	24844
╞	1980	0222	5424	694	6119	93	200	93	22100
F	1989	9222	3434 4210	084	0110	134	290	424	13/04
╞	1990	6774	4317	1201	4/19	247	233	400	12233
F	1991	0//4	20/1	2117	4102	21	9 <del>4</del> 012	129	11003
F	1992	6065	19/0	2117	4095	22	215	244	112/0
╞	1995	6054	1995	1977	4/13	2.3 65	220	204	11021
-	1994	5966	2847	18//	4/24	03	239	220	1082
	1995	3800	3460	955	4415	19	211	230	10509

## Attachment Q

## **Management Strategy**

The development of a management strategy for the global SBT fishery is a vital component of the Commission's work. A mid-term management strategy was developed in 1992 under the former informal management arrangement which set goals for management and outlined the actions which would be taken to achieve progress towards those goals.

The Commission commenced work on a management strategy for the SBT fishery in 1994, with subsequent exchanges of view amongst the parties during 1994 and 1995. To maintain the momentum on this important issue, Australia proposes the following course of action:

- (a) Australia to prepare a paper setting out elements for inclusion in a revised draft management strategy, taking into account the papers and responses already prepared and recent developments in the SBT stock assessment.
- (b) Japan and New Zealand to provide comments on the Australian paper within eight weeks of receiving it.
- (c) Australia to prepare a revised paper taking into account the comments from Japan and New Zealand.
- (d) The Commission to convene a workshop during the first half of 1997 for collaborative work on development of a management strategy, to report to the 4th Annual Meeting of the Commission using the revised Australian paper as a working document.

CCSBT/SC/96/33

## Joint Pilot Plan for Experimental Fishing Program for SBT Fisheries Agency of Japan

August 19,1996

## I. Introduction

Substantial differences have been observed in assessment of southern bluefin tuna stock by Japan, Australia and New Zealand. It has been pointed out that one of the major causes of such differences was in the models dealing with CPUE used for VPA tuning (Report on Workshop on Developing a Framework for Evaluating the Impact of Experimental Fishing on the SBT Stock. May - June, 1996). This is a problem arising from the fact that, as compared with the scope of the fishing grounds in the 1970s and 1980s when more flexible operation took place under the larger TAC. the scopes of fishing activities have been limited both in terms of time and space in recent years as a result of introduction of lower catch quotas, coupled with the improvement of CPUE for lower-age fishes. In other words, in order to use CPUE as an abundance index, it was necessary to maintain yearly consistency and this encouraged scientists of Japan, Australia and Zealand to propose differing approaches to obtain better abundance indices representative of both areas fished continuously and not fished in recent years. The unverified approaches are used for stock assessment, although they are still in the stage of hypotheses.

At present there are following hypotheses (models) with regard to the dealings of CPUE:

- 1. Constant square (Spatial extent remains constant between years. Stock area has been defined as the area fished over all years.)
- 2. Variable square (Spatial extent varies between years. The density of fish outside a fished area in a year is assumed to be zero.)
- 3. B ratio (Spatial extent remains constant between years. However, CPUE in an area fished is assumed to be higher than that in an area not fished.)
- 4. B min (Spatial extent remains constant between years. The density in regions not fished is assumed to be a small value.)
- 5. B habitant (Spatial extent remains constant between years. The CPUE in a area not fished is set equal to a value which is a function of both the average CPUE in the area fished and the spatial extent of that area.)

For this reason, the Government of Japan proposed an experimental fishing program (EFP) before the first special meeting of the CCSBT held in January 1996 with a view to clarifying the issues surrounding CPUE. Also, Australia submitted two plans to the Workshop at Shimizu, Japan in May - June 1996. However, no solid views were obtained on the assessment of effects on the stock of the each plans of experimental fishing at the Workshop, which aimed, it was hoped, to clarify much of the uncertainty in stock assessment. Although the implementation of the EFP will be discussed in line with the agreed timetable stand after the Second Special Meeting of the Commission, the present pilot plan is intended to test feasibility of these experimented surveys and their effectiveness, and improve EFP with a view to realizing full-scale implementation of the survey possible. In the pilot plan, the Japanese proposal and the Australian proposal (one of the two which focuses on the comparison of areas) will be implemented in parallel.

Furthermore, in order to have the three countries benefiting from the survey bear the cost of the survey and to ensure its transparency, it is indispensable that the survey is conducted jointly by three countries.

### II. Objectives

The objectives of the EFP are to obtain data from the area and period from which data have not been available due to shrinkage of fishing grounds and to contribute to dissolving the uncertainties surrounding the hypotheses to dealing with CPUE needed for stock assessment. In the pilot plan, the practicability (whether the appropriate data can be obtained) and effectiveness (whether the data obtained serve for the verification of the hypothesis and contribute to the improvement of stock assessment) of the proposed EFP of Japan and Australia should be examined with a view to improve them.

In the first part of the surrey (based the original Japanese proposal), efforts will be made to reproduce the past operational patterns, as much as possible, with participating vessels operating the given areas as freely as possible. Verification work shall be made to determine from the obtained data which hypotheses are most suitable to maintain yearly consistency of CPUE data as an abundance index.

In the second pant of the survey (based on one of the two Australian proposals), the areas which now constitute the fishing grounds (composed of 5x5 statistic areas) and those around them which are no longer fishing grounds at present are selected. The survey is intended to assess the hypothesis by determining the relative value of CPUE in the two sets of areas through the operation of participating vessels in these areas and compare this with the relative value for the same two sets in 1980.

Both the Japanese and Australian proposals have their strengths and possible weaknesses and comparison of the results from the two parts of the survey in the pilot plan will hopefully determine which of these will prove more effective. The pilot plan will be continued in case the estimation of the variations in annual catchability is necessary.

## III. Survey method

- 1. Survey, Part 1
- 1) Survey period

The fourth quarter is the period in which surveys can be smoothly implemented as soon as this year's annual Commission meeting makes a decision on this matter. In addition, fishing vessels can participate in the survey easily in this period. For these reasons, the survey period will be set for October-December 1996. After the implementation of the survey Part 1, the pilot plan can be improved if scientists of three countries determine it necessary to do so in the light of the results of the first survey. The pilot plan can be repeated in 1997 in case the scientists of the three countries considered it necessary.

2) The survey area will be set for Areas 7 and 8 (Fig. 1).

Areas 7 and 8 had the largest harvests in the past operations. Areas 7 and 8 were selected as the survey area because the greatest difference in abundance index can be found between the CPUE hypotheses of Japan and Australia (Fig. 2) in those areas and is fairly compact area with small east-west extent. Both areas will be divided into two subareas; the consistent fishing ground (Subarea A), and the past fishing ground (Subarea B). The total area (Subarea A plus Subarea B) will be based on 1969-1995 data as the scope in order to secure the consistency with the constant square model. 1991-1995 data will be used as the scope for Subarea A in Area 7 and 1994-1995 data will be used as the scope for Subarea A.

3) The method of fishing vessel deployment

As there could be the following two options, the Scientific Committee will discuss merits and demerits of them.

## Plan I:

The deployment of fishing vessels is to be implemented under the control of each member state. However, in order to maintain the consistency with the data obtained in the past, the operation will be carried out in line with the ordinary commercial patterns of the participating vessels.

#### Plan II:

The number of operations by area (7 and 8) and by month (Oct. to Dec.) in Subarea A and B will be calculated from the data of 1969-95. Participating vessels will be designated into Areas 7 and 8 and days by Subareas will be allocated to vessels based on the past ratio of operations. Details are show in Item 5).

#### 4) Survey items

- a) Catch of SBT and fishing efforts made for the catch
- b) length and weight composition of SBT
- c) Species composition of catch
- d) Collection and preservation of stomach content specimens of SBT
- 5) Necessary quota and the number of participating vessels

The quota needed will be \*\*\* tons and the number of longline vessels to be used will be \*\*\*. These figures have been estimated through the following methods. The number of operations needed to estimate the CPUE ratio of Subarea A and B (B CPUE/A CPUE)

in a precision of CV=0.1 or above in a given area will be obtained, through the bootstrap method using the 1980 commercial fishing data. The results are multiplied by the number of areas and months to estimate the number of vessels and quota needed. The quota should not be allocated to each vessel as individual quota in order to ensure the operation patterns of around 1980. In this case, number of operations (i.e. number of vessels and period of operations) is an essential factor. We multiplied the number of operations by assumed catch rate of 0.5t/day as an estimator of catch quota.

- 2. Survey, Part II
- 1) Survey period

October-December 1996. The pilot plan will be extended in case the scientists of the three countries considered it necessary.

## 2) Survey area

The fishing grounds have been reduced substantially as compared with 1980. The survey area will be designated in Area 8 which is deemed to be useful for comparison through surveys. (However, this does not exclude the possibility of carrying out surveys in other areas that show higher practical feasibility, with the participation of Australia and/or New Zealand.) Two blocks (5\*5) each will be selected in the central operation areas in the recent years (Subarea A) and in area in which operation took place only in the past (Subarea B). This will be selected without any regard to the EEZs.

## 3) Survey items

Same as proposed for the Part I (or add some items from the original Australian proposal).

## 4) The method of fishing vessel deployment

The participating vessels will be divided into four groups and rotate at an interval of half month. Assuming the areas of the central fishing grounds as A1 and A2 and the past operation areas as B1 and B2, one group rotates as from A1 and B1 (first month) to A2 and B2 (second months), and A1 and B1 (third months). (This is close to the original proposal but it could produce bias depending on the vessel capability.)

## 5) Necessary quota and the number of participating vessels

The quota needed will be \*\*\* tons and the number of longline vessels employed will be \*\*\*. These figures have been estimated through the following methods. The number of operations needed to maintain the CPUE precision at CV=0.1 in a given block is estimated to be 25 operations, using the 1980 commercial catch data. Then 25 operations are multiplied by the number of blocks, months, and 0.5 ton (catch rate) to estimate the number of vessels and quota needed.

#### IV. Allocation of sampling quota for Part I and Part II of the survey

With respect to this allocation, it should be noted that there is a need to give full consideration to the commercial and economic aspects of the participating vessels especially in the Part II survey.

## V. Effects on the stock

The stringent criterion requiring that there should be no substantial negative effect on recovery prospects as a result of a proposed experimental catch in all the options employed in the stock assessments by Japan and Australia is not necessary at all times. (After all, were this the case, there could be no objection to increase the normal TAC by this amount).

Calculation of the restoration probability and assessment by means of VPA models of the two countries, as to be modified in the coming Scientific Committee, will be made, using the three countries' weighted average of the input data obtained at the 1996 Shimizu Workshop (or as may be updated at the Scientific Committee this year). (The calculation results at the present stage concerning the case of 3, 000 tons will be a reduction by 19% in the worst case.)

Furthermore. after the implementation of the pilot survey, assessment of its effect will be made by means of the VPA models of the two countries using the data obtained to that point (commercial catch data and the data obtained from the survey). If (though Japan considers this very unlikely) the adverse effects are confirmed and the obtained data were found insufficient from the scientific point of view, the three countries will reduce their quota from the next fishing season onward in accordance with an appropriate quantity based on the assessment.

## VI. Boarding of observers

As many observers as possible will be allocated onboard the survey vessels, with a provisional (or intended) target coverage of 10%.

## VII. Utilization of pilot survey results

The data obtained from the pilot plan will be used for designing the full-scale experimental fishing program and its effective implementation.



Fig.1 Survey areas. Thick and shadow blocks indicate Subareas A and B respectively







1980 in 1,000 hooks

			Long.												
Area	Month	Lat.	85	90	95	100	105	110	115	120	125	130	135	140	145
$\overline{7}$	10	40			•					126	193	120	182	32	195
		45			•		•					18	34	15	126
	11	35									2				
		40								427	486	1021	2086	735	339
		45			•						5	207	659	926	473
	12	40			•					49	306	147	436	649	588
		45				•					31	48	1005	3707	3304
8	10	35	87	735	797	468	44	10	91						
		40	6	419	1150	734	229	35	505						
		45			2										
	11	35		18	28	33	6		15						
		40		15	163	656	24		102				•	•	•
	12	40			87	701	101							•	•
		45			•	74	14				•				

N	Jum	ber	of	hooks	bv	Subareas	in	1980
*	1 MIII	NOT	OT.	moone	· ~ .	N abai oub	<b>TTT</b>	1000

Number of hooks by Subareas in 1980						
	А	В	Total			
Area 7 Oct	126	915	1041			
	(12)	(88)	(100)			
Nov	339	7027	7366			
	(5)	(95)	(100)			
Dec	588	9682	10270			
	(6)	(94)	(100)			
Area 8 Oct	3648	1664	5312			
	(69)	(31)	(100)			
Nov	910	150	1060			
	(86)	(14)	(100)			
Dec	889	88	977			
	(91)	(9)	(100)			



Fig. 2. Abundance indices of constant and variable models in each Area

## Attachment S

## Japanese Proposal for a Joint Pilot Plan for Experimental Fishing Program for SBT (Australia's comments)

## 11 September 1996

## Summary

Australia has attempted to evaluate the Joint Pilot Plan for Experimental Fishing Program for SBT against the criteria given in the "Objectives and principles for the design and implementation of an experimental fishing program" developed by the Commission for the Conservation of Southern Bluefin Tuna (CCSBT). While Australia recognises that a Pilot Program may of necessity be simple and exploratory in design, there was not enough information provided for the risks and benefits of the Japanese proposal to be assessed effectively.

Australia has many questions concerning the proposal. The proposal, as presented, does not describe how the data collected would be used to scientifically test the alternative hypotheses identified. Questions concerning (i) exactly how the information obtained will be used in the stock assessment, (ii) the types of analyses that will be conducted with the data and (iii) the way in which extra information will improve the stock assessment need to be addressed.

Based on recent risk assessments carried out by the Scientific Committee, it is apparent that taking additional catch from the SBT stock significantly affects the probability of recovery to 1980 levels by the year 2020. It is Australia's view that it is difficult to justify taking higher risks with an already heavily overfished stock when the benefits have not been clearly identified.

Two important questions have to be answered. The first is how much of the total uncertainty of the current stock assessment would be reduced if the CPUE interpretation problem was resolved and secondly, whether there are more effective methods to achieve this instead of experimental fishing? Simply having more data with the same confounding effects between fishery targeting and fish distribution is not likely to allow resolution of the effect of these on the interpretation of CPUE, especially the historical CPUE.

Australia, never-the-less, remains positive to the development of experimental fishing and adaptive management approaches which can deliver statistically and scientifically valid results and facilitates the achievement of fishery management objectives.

## Introduction

The "Joint Pilot Experimental Fishing Program for SBT" proposal (hereafter referred to as the Pilot Program) was provided by the Fisheries Agency of Japan on August 19, 1996. Australia undertook to provide comments on the document by 11 September

1996.

First, Australia consider that the Pilot Program should not be discussed in detail until the Commission decides whether it should go ahead or not. In the meantime, the following is a summary of Australia's preliminary comments.

Comments are based on Australia's view is that a well-designed and well evaluated adaptive management experimental program can be an important tool for reducing uncertainty in the assessment of stock status and improving future management. However, it must not jeoparadise the recovery (defined in terms of the probability of returning to 1980s spawning stock size by 2020) of SBT parental spawning and must provide demonstrable benefits for future management.

The "Objectives and principles for the design and implementation of an experimental fishing program" (Anon, 1996a) developed by the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) provided a set of criteria on which to base our comments.

## 1. Any experimental fishing program's aim should be to reduce uncertainty in the stock assessment and projections as far as possible.

The pilot Program states that its objectives are "to obtain data from the area and period from which data have not been available due to shrinkage of fishing grounds and to contribute to dissolving the uncertainties surrounding the hypotheses to dealing with CPUE needed for stock assessments".

In our opinion, these objectives are back-to-front. The objective of a scientific study is not to obtain data as an end in itself, but rather it is to use the collected data to answer specific questions. The logical steps are (i) determine which uncertainty will be reduced, (ii) determine how big the reduction will be and (iii) decide on what data are needed to achieve this.

As well as the interpretation of CPUE there are several other important sources of uncertainty in the current assessment. These include the age specific natural mortality rate, the relative reliability of CPUE as a measure of abundance for different age groups, the fishing mortality in recent years, the interpretation of the "plus" group CPUE, methods for initiating the "plus" group, and the relationship between fishing effort and fishing mortality. Current stock assessment and projection techniques can be used to determine what effect the removal of uncertainty in the interpretation of CPUE has on the overall assessment. Australia would also like to see an examination of other ways of reducing uncertainty (eg. the use of tagging experiments or modeling of changes in fishery operations)

## 2. The development, evaluation and the analysis of the result of the experimental fishing program should be collaborative and agreed between all parties.

The Pilot Program has attempted in incorporate previous Experimental Fishing Proposals (EFPs) put forward by Japan and Australia. However, in doing this it has ended up with two different survey methods both attempting to achieve the same objective. This results in having to double the catch needed to conduct the experiment. The advantages and disadvantages of the two survey plans could be evaluated from existing data and knowledge of fishing patterns along with an analysis of the degree of uncertainty that will be resolved using either plan. Simply adopting both plans puts increased pressure on the stock and does not represent true collaboration and amongst all parties.

The overall aim of the proposal appears to be collect information that will be used to design a full-scale experimental fishing program and its effective implementation. Australia is interested in how the information from the pilot study would be used to evaluate whether a full-scale program is, in fact, justified or feasible. It is also keen to see analyses of how the data from the pilot will be used to optimise the design of a full-scale program.

The proposal makes no mention of who would own and have access to the data from the experiment, and who would conduct the analysis of these. It is Australia's view that the results would have to be available to all parties and detailed collaborative analyses would have to be carried our before any further decision were made.

# 3. The development and implementation of any program should not adversely impact on the process of conducting the annual stock assessment or the Commission's agreed program of other scientific work, recognising that the Commission may need to vary its agreed work program as priorities change.

The Pilot Program has already been a problem for the 1996 Scientific Committee process, where the integrity and scientific focus on the annual stock assessment was, in Australia's view, compromised by the proposed addition of the consideration of EFP onto the 1996 Committee's agenda. Australian scientists believe that a consideration of any EFP is a substantive issue and should be handled by specific meetings for that purpose to prevent erosion of the limited time available for the Scientific Committee to conduct core stock assessment work.

# 4. That any increase in catch, recommended above the current TAC to accommodate experimental fishing should not jeopardise the potential recovery of the parental stock to the 1980 level by 2020, or undermine other agreed management objectives.

The proposal should show why it is not possible to conduct the experiment within the existing quota. Japan places very high weight on interpretations of CPUE that imply average fish abundance in the area recently not fished, and is strongly of the view that extensive stock recovery is under-way. If these interpretations are correct, the economic risk of conducting the experiment within existing quota is low and quite feasible.

It is not clear from the proposal how much extra catch is needed, or what basis the calculation was made. The proposal suggests calculating the number of operations needed "to maintain the CPUE precision at CV=0.1".

More detailed information on what this means is required (eg. how was this CV estimated; what was the basis for using 10%; what does it mean that 10% be maintained; and over what temporal and spatial scales is a 10% CV going to be maintained?) Further questions such as the scientific implications of other levels of catch and precision also need to be addressed. Rather than calculating samples size in terms of the simple level of precision of the CPUE, consideration of the statistical power to resolve the alternative hypothesis is needed.

Without a clear specification of the management decision rule to be applied at the end of the experiment, it is difficult to evaluate the risk to the stock. An inconclusive experiment combined with no decision rule could be expected to result in continued experimental catch being sought. Therefore, scenario 3 (see Table) is probably the best scenario on which to base assessment of risks. In Australia's view, the probability of recovery, even under current catches, is low and of considerable concern. Additional catch further decrease the probability of recovery (see Table). In these circumstances, the scientific justification for an increase in catch to support experimental fishing would need to be very strong.

Table: Probability of recovery of the parental biomass to 1980 levels by 2020 using the Australian VPAs and country weighting of input data and tuning factors (from the 1996 Scientific Committee meeting).

	Australia	Japan	New Zealand	Externals
<b>Current catch</b>	36	79	29	69
Scenario 1*	29	65	21	61
Scenario 2	34	75	26	67
Scenario 3	16	20	9	43

\*Scenario 1 Additional catch of 3000t taken every year 1996-1998

Scenario 2 Additional 3000t 1996-1998 and a decrease of 3000t 1999-2001

Scenario 3 Additional 3000t catch taken every year up until 2020

Perhaps, attempts should be made to minimise the impact on the stock by designing an experiment which builds on the more extensive coverage presently existing in quarters 2 and 3 and taking a lesser catch. Other possible ways of minimising impact on the stock while maximising benefits include experimental fishing on the spawning grounds to reduce uncertainties surrounding the "plus" group.

## 5 That any experimental fishing program should be designed to deliver scientifically valid and meaningful results and that it should be designed for implementation by commercial fishing vessels.

The Pilot Program is clearly designed for commercial fishing vessels but it is not clear that is will deliver scientifically valid and meaningful results. As well as combining two experimental plans as discussed above, the Pilot Program contains two components. The first is to expand the time of fishing into the fourth quarter of the year. The second is to expand fishing into previously fished areas which are no longer fished.

The reason given for extending the temporal cover is that "fishing vessels can participate in the survey easily in this period". No scientific rationale is given to demonstrate that the choice of the fourth quarter is the best way to achieve the objective of reducing uncertainty. In fact, there are several reasons why the choice of the fourth quarter may produce results which are confounded by a range of other factors. The confounding factors include:

- changes in the availability of stock in this quarter as the adult fish move away from the experimental area to spawn;
- changes in targeting as a result of the spawning migration (either increased targeting or avoidance); and
- lack of spatial coverage in the historical time series in the quarter.

As an extra practical commercial consideration, October/December does not fit in with the Australian Industry's normal fishing program. It is likely that any collaborative program would have to include November/March and Jun/August to be acceptable.

With respect to the spatial coverage, the Pilot Program identifies four regions in Statistical Areas 7 and 8 for the experiment. The focus on Area 7 and 8 is questionable as these areas only border on current fishing regions. For testing the hypotheses concerning the interpretation of CPUE, Area 3, 4 and 2 would be more appropriate as the changes in fishing pattern in these areas have been more marked.

Even with Area 7 and 8, because these areas are very large (up to 21 5x5-degree areas in size), Australia would like to know whether any analyses have been carried out on which 5x5 degree squares have or have not been previously fished. This could lead to the identification of a core fishing area and 5x5 degree squares with a previous high CPUE (or otherwise) so that additional effort can be targeted in the areas where the uncertainty is highest. Specification of how the additional effort (and catch) is to be allocated across the 5x5 blocks is also is needed to determine what sampling precision can be achieved within each block.

The proposal states that "vessels will operates as freely as possible" and "will be carried out in line with ordinary commercial practices". Simply having more data from these ordinary commercial practices is unlikely to resolve uncertainty regarding CPUE interpretations. It is recognised that there is a need for some trade-off between commercial needs and scientific rigour, but a pilot proposal that lacks specification of an experimental design (in a scientific and statistical sense) ignores the central basis of scientific methodology.

## 6. There should be appropriate monitoring of any program, designed and conducted in a collaborative manner amongst parties.

The proposal does not relate the level of monitoring to the scientific needs of the experiment. The proposal mentions "a provisional (or intended) target" of 10% observer coverage. Much more specific and binding commitments for collaborative verification are needed. Verification of the data is a critical issue, and without adequate verification the experimental results will be open to a wide range of interpretations – possibly even increasing uncertainty in the stock assessments from the present levels.

A high level of observer coverage is likely be required given that experimental fishing effort will probably be small in a large number of area/time strata, and that essential aspects of the data can only be collected by observers. If such an experiment is to go ahead, Australia also believes that VMS should be used for position fixing on all vessels at all times.

In summary, if the proposal is to be evaluated scientifically, the following questions are pertinent:

- what are the hypotheses to be tested?
- what methods are to be used for testing the hypotheses?
- what is the statistical power of the proposed experiment to distinguish the hypotheses (including type I and II error rates)?
- how would the results of the experiment be used to aid interpretation of the historical CPUE?
- what reduction in uncertainty in the assessments would occur if the hypotheses can be resolved?

## **Other Issues**

Other issues which need to be considered include mitigation methods for albatross bycatch, eg. night setting, thawed bait, bait throwers etc.

Data collected during the survey should also include:

- collection of biological samples, in addition to stomach contents, of SBT (eg. otoliths, gonads);
- details of the targeting and fishing methods;
- details of the by-catch, in addition to a species list, including numbers of individuals, weight estimates and biological samples as required for scientific analysis.

## References

Anon (1996a) Report of the Second Special Meeting of the Commission for the Conservation of Southern Bluefin Tuna: Canberra, 29 April to 3 May 1996

Anon (1996b) Workshop on developing a framework for evaluating the impact of experimental fishing on the Southern Bluefin Tuna Stock: 27 May – 1 June 1996. National Research Institute of Far Seas Fisheries, Shimizu, Japan

## Attachment T

## New Zealand Comments on Japan's Proposal for an EFP Pilot

New Zealand has considered Japan's proposal for a pilot Experimental Fishing Programme to be considered by the CCSBT Meeting in Canberra. While our comments should not be regarded as exhaustive they represent the main areas of concern this proposal raises. We consider that should the Commission decide to proceed with step 3 of the EFP process agreed at the second special meeting that many of these concerns could be addressed in light of specific areas of uncertainty in the SBT stock assessment

New Zealand acknowledges that, in principle, an Experimental Fishing Programme (EFP) is one way to reduce some sources of uncertainty in the SBT stock assessment. We also recognise that an appropriately designed EFP has the potential to provide supplementary biological material that could aid in the interpretation of SBT biology and ecology, and therefore directly or indirectly assist in the population dynamics modelling undertaken by Commission scientists.

It is also our view that to efficiently implement a full EFP, it may be necessary to conduct a pilot programme to test design aspects of any agreed EFPs and to resolve any operational details. New Zealand supports the development of Commission EFPs including a pilot programme within the framework agreed by the Second Special Meeting of the CCSBT in May 1996. The specific conditions of an EFP, set out Attachments C, D, and E of that meeting's report, in our view apply equally to a fully implemented EFP and to any pilot EFP. New Zealand has concerns that the pilot proposal by Japan does not adequately meet the agreed objectives and principles set out in those attachments.

From a procedural perspective, a pilot programme (by definition) is intended to precede a fully implemented EFP, as such it should be structured to test various experimental design aspects of the full programme to insure the objectives of the full EFP can be met and done so in an efficient manner. However, since we have yet to consider step 3 of the EFP process as was agreed, we do not yet have agreement on what the full EFP should be designed to do or whether the risk to the stock, as assessed in step 2, is sufficiently low to justify an EFP. We are unsure whether Japan's pilot programme would be an appropriate precursor to the type of EFP all parties could agree to because we have yet to discuss the outcomes of steps 1 and 2 and agree to progress with step 3 of the EFP process. As a consequence, consideration of a pilot programme seems premature since we have not agreed on what would be an acceptable risk nor have we agreed on the objectives of an EFP.

New Zealand has several concerns about Japan's proposal. The following points summarise our concern that the pilot programme preempts consideration by the Commission of what would be the most appropriate EFP and that it would not significantly contribute to reducing the uncertainty in the stock assessments:

1. It is not clear what data will be gathered or how it will be analysed so as to distinguish between the five CPUE hypothesis identified. The pilot is

described in this context as a test of the "feasibility of these experimental surveys and their effectiveness" but no specifics are given on how feasibility or effectiveness will be evaluated. This omission makes it appear to be a programme whose effectiveness can only be gauged after it has been completed. In this it lacks sufficient structure to ensure that the stated objectives can be met.

- 2. The stated objective of gathering data from the fourth quarter because of shrinkage of the fishing ground does not seem like a suitable objective for reducing the uncertainty in the stock assessment. This quarter is not used in the assessment because it has not been fished for a long time. Also at the recent Scientific Committee one paper clearly showed that the inclusion or exclusion of quarter 4 data made almost no difference to the overall CPUE trend. Based on the CPUE hypotheses listed the proposal clearly indicates that spatial rather than temporal changes in catch rate are the focus of the proposed pilot EFP. It is therefore unclear to us why fishing should be done in quarter 4 when the CPUE uncertainty arises from the data coming from quarter 2 and 3.
- 3. The choice of survey area is related to the choice of quarters fished and clearly needs to be linked to agreed EFP objectives, the areas proposed may or may not be the most appropriate depending on what are considered to be the most important objectives of an EFP. Given the uncertainty about the plus-group, for instance, it may be most appropriate to determine the age composition of SBT on the spawning grounds. If this were chosen as the most appropriate objective of an EFP then this would suggest an EFP pilot in quarter 4 in area 1.
- 4. The proposal does not specifically identify either the number of vessels or the tonnage of SBT required to meet the objectives. However, the reference to o btaining estimates with a CV of 10% suggests considerable effort and by extension a large tonnage especially for a pilot programme. We question why such a low CV has been chosen. We also question the reasonableness of designing an experiment assuming a catch rate of 0.5 tonnes per day based on 1980 catch statistics.
- 5. The objectives state that "efforts will be made to reproduce the past operational patterns, as much as possible, with participating vessels operating in the given areas as freely as possible". Given the technological and gear changes, changes in crew composition, etc that have been discussed in various CCSBT meetings an unrestricted fishing plan does not seem appropriate. In our view careful consideration needs to be given to determine if fishing activities could be structured to mimic an earlier period of the SBT fishery. Unrestricted fishing plans would not be expected to be sufficient.
- 6. The data to be collected seems to be unduly limited and does not reflect what we consider to be the most important for advancing the Commission's scientific objectives. We see no reason why stomach content analysis would be given high priority or why otolith collection for example would be omitted. We believe that a broader range of activities, including additional tagging experiments, needs to be considered as an adjunct to any such proposal.

- 7. The level of data verification proposed (10% observer coverage) needs to be justified in relation to the precision required to detect a given difference between the hypotheses being tested. Intuitively the proposed level seems inadequate.
- 8. We have agreed (attachment C, Objectives and Principles para 4) that any catch above the current TAC for an EFP should not jeopardise the potential for parental biomass recovery. Japan's proposal reinterprets the agreement between the parties as to what would be acceptable regarding the additional risk any EFP or pilot EFP might pose to stock recovery. We are very concerned that this reinterpretation seems to imply that contrary to our agreement it is sometimes not only acceptable for an EFP to jeopardise the potential for parental biomass recovery but also that "substantial negative effects" may also be acceptable.

New Zealand reiterates its willingness to advance measures to reduce uncertainty in SBT stock assessments including consideration of an appropriate cooperatively developed and implemented EFP which can be shown to have a reasonable expectation of meeting its agreed objectives and which does not jeopardise the potential recovery of the stock to 1980 levels. We also recognise that an appropriately designed EFP should provide additional information on SBT biology and ecology that will assist in the population dynamics modelling undertaken by Commission scientists. In our view the EFP pilot proposal does not meet these criteria.

Prepared by; Dr. Talbot Murray

Head, New Zealand Delegation to the CCSBT Scientific Committee

## Attachment U

## Scientific Committee Procedures and Processes - Issues that need to be addressed/Clarified to improve performance of the Committee

- role and authority of Heads of Delegation (HOD) meeting including;
  - $\Rightarrow$  extent of decision making power
  - $\Rightarrow$  ability to make administrative decisions
  - $\Rightarrow$  the need, or otherwise, to have decisions endorsed at plenary
- need to achieve balanced input from HOD, plenary and all members to the Committee
- need to improve efficiency of Committee's operations
- need to ensure that there are no language barriers to effective participation of all members
- need to clarify form and content of report(s)
- clarify mechanisms of reports production the appointment and work of rapporteurs or drafting committee
- balance between efficiency of production and appropriate review of report(s)
- sufficient time to produce reports and conduct meeting
- ensuring agenda and workload are realistic in terms of time and resources available
- suggestion of technical secretary to assist meeting
- the need for an effective mechanism to resolve disputes on agenda or mechanism to ensure they don't happen
- clear agreement on how the Chair is to proceed in the event of disagreement on conduct of meeting
- clarify role of external scientists including;
  - $\Rightarrow$  instructions as to precise role so it is clear to all parties
  - $\Rightarrow$  qualifications and characteristics of external scientists required
  - ⇒ can we improve the working of the Scientific Committee by appropriate use of external scientists?
  - $\Rightarrow$  mechanism to maximise the contribution from external scientists
  - $\Rightarrow$  source of funding for external scientists
- the need for a mechanism to ensure the Scientific Committee addresses high priority issues referred to it by the Commission
- the relationship between the Scientific Committee and the Commission clarify the extent of separation and ensure the Scientific Committee restrains its work to science, but is responsive to the Commission
- clarification of appropriate membership of scientific delegations and whether practicing managers should or should not participate
- to what extent can be commission and its rules influence the make up the delegations
- whether a restructuring of the Committee, including processes, participation and roles could assist the achievement of consensus and agreed outcomes.
- documents prepared by each nations' scientists including;
  - $\Rightarrow$  difficulty of dealing with lengthy unsummarised documents in foreign language

- $\Rightarrow$  need to ensure documentation is adequate to allow discussion, review and replication of analysis
- need to ensure members comply with timetables for document and data exchange
- need to develop for scientific exchange to improve mutual understanding
- to what extent the Scientific Committee should make recommendations to the Commission
- need to document scientific premises
- need for documents that include the rationale behind conclusions
- adequate peer review of scientific results
- to ensure there is full and open discussion by all scientists on how they have reached their conclusion
- sufficient time for delegations to consider alternative or new approaches before discussing them
- processes for notification and adequate review of new methods of analysis
- to ensure that the most appropriate and best available methods of analyses and data are used
- process for facilitating participation of non-party scientist as observers at the Scientific Committee Meeting
- mechanism for modification of past procedures
- need ensure adequate time for scientific review and discussion of documents in the Scientific Committee Meeting
- need to ensure appropriate balance between time for computation and discussion and Scientific Committee Meeting, and ensure new computation are adequately checked
- clarify the role of the Secretariat in supporting the Scientific Committee
- what qualification would be desirable and expected of members of the Scientific delegations

## Attachment V

## **Commission for the Conservation of Southern Bluefin Tuna Revised Draft Terms of Reference for the Compliance Committee**

The Compliance Committee, in accordance with the Convention and consistent with relevant provisions of international law, will;

- 1. review the southern bluefin tuna (SBT) fishing activities of each Party to the Convention, including compliance with national quota allocations and associated fishery management arrangements.
- 2. develop co-operative observation and inspection arrangements for southern bluefin tuna fisheries.
- 3. review matters and prepare an annual report relating to implementation of conservation and management measures decided by the Commission, including:
  - (a) exchange of information on the activities by which each Party ensures compliance by vessels flying its flag; and
  - (b) exchange of information on measures including legislative and administrative arrangements and penalties; and
  - (c) exchange of views on practical and cost effective measures for improving monitoring and compliance.
- 4. exchange information on flag State SBT enforcement activities including outcomes, where appropriate of judicial and administrative proceedings and the development of measures to ensure compliance with Commission measures and recommendations.
- 5. encourage co-operation in the undertaking of surveillance, including arrangements for the exchange of information of sightings and other information about activities of vessels.
- 6. promote Commission conservation and management measures and provide a forum for liaison with States or entities not party to the Convention.
- 7. exchange information on activities for taking SBT by nationals, residents or vessels of any State or entity not party to the Convention.
- 8. report the results of discussions, including making recommendations as appropriate, to the Commission.

## Attachment W

## Chairman incorporation of points from Scientist discussions:

## **Questions for the 1997 Scientific meeting**

(Note: these questions should be read with Article 9(2) of the Convention)

- 1. What is the status and trends for parental biomass and recruitment in particular report on P(PB2020 > PB 1996), expected PB1997/PB1996, and expected PB1998/PB1997?
- 2. If the parental biomass is expected to decrease on average in the long term, what reductions in removals will reverse this trend?
- 3. If the parental biomass is increasing, how long will it take to rebuild to the 1980 parental biomass levels at current removals?
- 4. What catch scenarios result in 50% and 75% probability of recovery of the spawning stock biomass to 1980 levels by 2020?
- 5. What are the major sources of uncertainty in the assessment? What steps can be taken to reduce these?
- 6. With respect to stock projections provided in previous scientific reports how well have the previous projections predicted subsequent stock abundance?
- 7. To what extent is it possible to express the degree of certainty and adequacy of key parameter estimates and data used in the stock assessments?
- 8. What are the best estimates of catch, effort, the distribution of the catch by area and season and catch size composition of non-party catches, what are the sources of the estimates and how can their accuracy be improved?
- 9. What biological reference points have been recognised by fisheries scientists as providing useful information for fisheries management? Which of these are likely to be useful in the case of SBT ? What is the evaluation of the status of SBT with respect to those reference points that can be calculated using the current assessment techniques?
- 10. For the basic uncertainties included in the projections what are the weights assigned given to the different hypotheses and what is the basis for the weights?

Scientist comments for the above questions

- Q1 Specifically report, for current catches; p(PB 2020>PB1996) expected ratio of PB 1997/PB1996 expected ratio of PB1998/PB1997
- Q6 Clarify what is intended by stock structure. Presently not clear. Does this mean age structure or is it an unnecessary detail.
- Q8 Does :"catch distribution" in this question mean "area and season of catches"
- Q9 Suggested change

What biological reference points have been recognised by fisheries scientists as providing useful information for fisheries management? Which of these are likely to useful in the case of SBT? What is the evaluation of status of SBT with respect to the reference points that can be calculated from the current assessment techniques.

## Q10 Suggested change

For the basic uncertainties in the projection, what are the weights assigned what is the basis for these weights.

## General note

The scientist noted that the additional questions this year will require additional analysis, and the Scientific committee may not be able to complete all of this work.