NEW AND EXPLORATORY FISHERIES

New and Exploratory Fisheries in 2002/03

9.1 The Commission noted that six conservation measures relating to eight exploratory fisheries were in force in the 2002/03 season, but fishing only occurred in respect of four fisheries (SC-CAMLR-XXII, paragraphs 4.157, 4.158 and 4.160):

- in Subarea 88.1, 1 792 tonnes of *Dissostichus* spp. were taken against a catch limit of 3 760 tonnes and fishing occurred north of 65°S and south of 65°S;
- in Subarea 88.2, 106 tonnes of *Dissostichus* spp. were taken against a catch limit of 375 tonnes;
- in Division 58.4.2, 117 tonnes of *Dissostichus* spp. were taken against a catch limit of 500 tonnes.

In Subarea 88.1, fishing had been restricted by icebergs and sea-ice and vessels had not fished south of 72°30'S because of safety concerns.

9.2 The Commission also noted that although the overall catch was about 50% of the catch limit for Subarea 88.1, catch limits in two fine-scale rectangles were exceeded by 3%, and the catch limit in SSRU 881C was exceeded by 106 tonnes (13%). It was noted that the reason that the catch limits were exceeded was as a result of high catch rates combined with inherent delays in closing areas as a result of using a five-day reporting cycle (CCAMLR-XXII/BG/8 Rev. 1).

9.3 The Commission also noted that currently for each active exploratory fishery, the Secretariat reported every five days to Members engaged in that fishery and provided an up-to-date total catch of the target species by fine-scale rectangle, SSRU and for the fishery as a whole. However, the Secretariat only forecast closure dates for each fishery as a whole (e.g. longline fishery in Subarea 88.1 south of 65°S), and did not attempt to forecast closures in fine-scale rectangles or SSRUs (SC-CAMLR-XXII, paragraph 4.159).

9.4 The Scientific Committee had advised the Commission that all but one vessel fishing in exploratory fisheries in 2002/03 had been able to complete their quota of research sets (SC-CAMLR-XXII, paragraph 4.162).

9.5 The Scientific Committee advised that some Members had experienced difficulties with some provisions of Conservation Measures 10-04 and 24-02 in that these measures may contain potentially contradictory licensing requirements (SC-CAMLR-XXII, paragraph 4.175). This matter was further considered in section 10.

9.6 The Commission noted that advice from Members not intending to enter a fishery, as required under paragraph 9 of Conservation Measures 41-01, had only been received from Japan in respect of five fisheries, and New Zealand in respect of one fishery (SC-CAMLR-XXII, paragraph 4.161).

New and Exploratory Fisheries Notified for 2003/04

9.7 The Commission noted that a total of 31 notifications for exploratory fisheries in 2003/04 had been made by 14 Members and there were no notifications for new fisheries. Four of the notifications for exploratory fisheries were incomplete or not submitted by the deadline (SC-CAMLR-XXII, paragraphs 4.163, 4.164 and 4.172).

9.8 Twenty-nine notifications of specific vessels were for exploratory longline fisheries for *Dissostichus* spp. and one notification was for an exploratory trawl fishery targeting *Dissostichus* spp. and *Macrourus* spp. These notifications covered most statistical subareas and divisions in the Convention Area, including Subarea 48.3 and EEZs in Divisions 58.5.1 and 58.5.2 where assessed fisheries for *D. eleginoides* occur, and Subareas 48.1, 48.2, 58.6 and 58.7 and Division 58.4.4 which are closed to directed fishing until further surveys are conducted (Conservation Measures 32-02, 32-03, 32-10, 32-11 and 32-12). The remaining notification was for an exploratory trawl fishery targeting *Chaenodraco wilsoni*, *Trematomus eulepidotus*, *Lepidonotothen kempi* and *Pleuragramma antarcticum* in Division 58.4.2 (SC-CAMLR-XXII/BG/5 Rev. 1).

9.9 The Commission reaffirmed that each of the Subareas 48.1, 48.2, 58.6 and 58.7 and Division 58.4.4 (outside EEZs) would remain closed to fishing on *Dissostichus* spp. until a survey had been completed, the results analysed, and the fishery was reopened on the advice of the Scientific Committee to the Commission.

9.10 The Commission also noted that (SC-CAMLR-XXII, paragraphs 4.167 to 4.170):

(i) the Scientific Committee had requested clarification on the role of WG-FSA in assessing notifications with regard to closed areas and notifications that were incomplete and those that had been submitted late;

(ii) notifications fell into two categories:

- notifications to participate in an exploratory fishery that had been active in the previous season and with operational details consistent with existing measures;

- notifications to fish in subareas and divisions currently closed to fishing by conservation measures and/or with operational details absent or not consistent with existing measures;

(iii) the Scientific Committee was concerned that the large number of notifications placed a considerable workload on WG-FSA and WG-IMAF;

(iv) the Scientific Committee recommended that, in order to undertake exploratory fishing in subareas or divisions currently closed by conservation measures, Members should follow the procedures outlined in Conservation Measure 24-01 (Application of Conservation Measures to Scientific Research).

9.11 The Commission recognised the considerable workload which notifications imposed on WG-FSA, WG-IMAF and the Scientific Committee. Therefore, the Commission agreed that in future the Scientific Committee and its working groups should only consider

notifications which were complete and had been submitted by the deadline. Notifications submitted after the deadline, or which were incomplete at the time of the deadline should not be considered. The cost of processing notifications was considered in section 3.

9.12 The Commission also agreed that, in order to undertake exploratory fisheries in subareas or divisions currently closed by conservation measures, Members should in future follow the procedures outlined in Conservation Measure 24-01. This will require that a research plan be submitted to the Secretariat at least six months in advance of the planned start date for fishing.

9.13 There has been a very large number of notifications for fishing in some localities. It was noted that, depending on the size of the precautionary catch limits, this implies that if all vessels were active in the fishery, the available catch per vessel could be lower than that required for economic viability, especially for those vessels operating in high latitudes where fishing imposes considerable operational difficulties.

9.14 The Commission noted the Scientific Committee's management advice that the yield by analogy with Subarea 48.3 should no longer be implemented to determine yields in Subareas 88.1 and 88.2. The Scientific Committee could offer no specific advice on catch limits for the *Dissostichus* spp. fisheries in Subareas 88.1 or 88.2. However, as a precautionary measure the Scientific Committee recommended that the current catch limits should not be exceeded for these two subareas (SC-CAMLR-XXII, paragraph 4.212). It recommended that the division of any catch limit agreed by the Commission in Subarea 88.1 should follow the proportions given in SC-CAMLR-XXII, Table 6.

9.15 The Commission noted the Scientific Committee's debate on the setting of catch limits in SSRUs in Divisions 58.4.1 and 58.4.2 (SC-CAMLR-XXII, paragraphs 4.204 and 4.205). This matter is further considered in section 10.

Small-scale Research Unit (SSRU) Boundaries

9.16 The Commission endorsed the Scientific Committee's revision of SSRUs in Subarea 88.1 to better capture the irregular shapes of the bathymetric features and fishing grounds encountered in the subarea. This revision resulted in 12 new SSRUs which were more similar in size to those in other CCAMLR areas (SC-CAMLR-XXII, paragraph 4.177).

9.17 The Scientific Committee had also reviewed the need for catch limits in fine-scale rectangles in Subarea 88.1 because these were becoming difficult to manage with the increasing number of vessels operating in that subarea. The Scientific Committee believed that increasing the number of SSRUs, whilst at the same time removing catch limits on fine-scale rectangles, would overcome many of the current problems with area closures. Other options for better managing catch limits in SSRUs included reducing the amount of effort in SSRUs, more frequent reporting of catches, and the forecasting of closures of SSRUs (SC-CAMLR-XXII, paragraph 4.178).

9.18 The Commission considered a proposal for introducing a daily catch and effort reporting system in exploratory fisheries (paragraphs 10.24 and 10.25).

9.19 The Commission agreed that the catch limit in fine-scale rectangles should be removed in Subarea 88.1, and that the catch limits in SSRUs would be better managed by forecasting closures in these units. However, the Commission noted that the forecast method now used by the Secretariat required information on the movement of vessels into, and out of, the area under management. Therefore, forecasting closures in SSRUs would require the Secretariat to have access to information on the movement of vessels into and out of SSRUs.

9.20 The Commission requested the Secretariat, in the intersessional period, to develop a procedure for forecasting closures in SSRUs, giving consideration of the costs involved and to report back at CCAMLR-XXIII.

9.21 The Commission noted that the Scientific Committee had provided advice for establishing SSRUs in all subareas and divisions where exploratory fisheries were conducted. Therefore, the Commission agreed to remove catch limits in all fine-scale rectangles (see paragraph 9.19).

9.22 The Commission endorsed the Scientific Committee's management advice (SC-CAMLR-XXII, paragraphs 4.214 to 4.220), including:

- continuing with research plans in the fisheries in Subareas 88.1 and 88.2 with a change that only 10 research sets be required in SSRUs where the fishable seabed area is less than 15 000 km^2 and with the addition of the mark–recapture program;
- establishing SSRUs spanning 10° of longitude in Divisions 58.4.1 and 58.4.2 and with a single SSRU in Division 58.4.1 north of 60°S;
- in Divisions 58.4.1 and 58.4.2 retaining the existing provision to prohibit fishing in water less than 550 m deep;
- setting a catch limit for *Macrourus* spp. of 159 tonnes in Division 58.4.3a and 26 tonnes in Division 58.4.3b;
- retaining the elements of Conservation Measure 41-04 for Subarea 48.6, taking account of advice on line setting (SC-CAMLR-XXII, paragraph 5.38).

9.23 The Commission recommended that the new tagging protocol for new and exploratory fisheries be added to the *Scientific Observers Manual*.

Future Work

9.24 At last year's meeting the Commission urged Members to undertake further research on methods of monitoring abundance of *Dissostichus* spp. in Subareas 88.1 and 88.2 (CCAMLR-XXI, paragraph 9.18). The Commission was pleased to note the following developments (SC-CAMLR-XXII, paragraphs 4.190 to 4.194):

(i) During the intersessional period New Zealand looked at different approaches including the feasibility of acoustics, standardised CPUE analysis, simulation

studies of research sets and a tagging feasibility study. Of these approaches, New Zealand considered that the implementation of a suitably designed tag–recapture experiment was most likely to succeed.

(ii) The Scientific Committee had discussed the relative benefits of trawl surveys, tagging studies, depletion experiments and experimental management of fishing effort, and had agreed to implement tagging programs.

(iii) The Scientific Committee considered that additional approaches would be required to provide estimates of biomass in the short to medium term and recommended that, during the intersessional period, the following work program be carried out by Members fishing in Subarea 88.1:

(a) carry out further tagging simulation studies as detailed in SC-CAMLR-XXII, Annex 5, Appendix D, to determine the best approach to tagging in Subarea 88.1 that could lead to an assessment;

(b) review practicalities and possible research designs for carrying out a trawl survey on juvenile *Dissostichus* spp. in the Ross Sea;

(c) carry out simulation studies to determine optimal ways to direct fishing effort, both within and between years, to achieve necessary contrast in fishery and stock parameters that could lead to an assessment.

9.25 The Commission noted that even with the active participation of the fishing industry in a comprehensive mark–recapture program, it would take at least 10 years before a precise estimate of abundance could be obtained. It also noted that different approaches to obtain the necessary data to lead to an assessment may not be mutually exclusive. For example, an experiment combining an intensive tagging program and the management of effort in a few SSRUs for two to three years could provide a powerful tool for estimating population abundance and other input parameters required for an independent assessment of yield (SC-CAMLR-XXII, paragraphs 4.195 and 4.198).

9.26 The Commission endorsed the intersessional work program, and urged the Scientific Committee to establish, as a matter of urgency, a research program which would provide the data necessary for a long-term assessment of *Dissostichus* spp. stocks in Subarea 88.1. The Commission expressed concern at the growing number of vessels involved in this fishery, and the current paucity of information on which the scientific advice was based.