FISHERY STATUS AND TRENDS

Krill

Harvest Levels for the 1999/2000 Season and Intentions for the 2000/01 Season

- 2.1 Reported catches of krill (*E. superba*) from STATLANT data are shown in Tables 1 and 2. A total of 101 286 tonnes was caught during the 1999/2000 split-year. The catch was taken by Japan, Republic of Korea, Poland, Ukraine and Uruguay.
- 2.2 The following plans for krill fishing during the 2000/01 season were reported: Japan expects to reduce the number of its vessels from four to three but will maintain its current harvest level; Argentina, the Republic of Korea, South Africa and Uruguay each expect to have one vessel fishing for krill. Both Russia and Ukraine indicated that they would deploy two vessels each. The USA reported it will have one or two vessels fishing and the UK indicated it may have one vessel fishing for krill. No information was received from Poland, which has fished in recent years, nor from Canada, a non-Member nation that has previously stated its intention to fish for krill.

Compliance with Data Reporting Requirements

2.3 The Scientific Committee noted that not all monthly catch and effort reports from the krill fishery were submitted by Members on time subject to the requirements of Conservation Measures 32/X and 40/X (CCAMLR-XIX/BG/5 Rev. 1, Figure 2).

Krill Economics

- 2.4 The last two meetings of the Scientific Committee have requested information from the krill fishery on past and current market prices for krill products (SC-CAMLR-XVII, paragraphs 2.5 and 2.6; SC-CAMLR-XVIII, paragraph 2.7). This information is needed for economic analysis of the fishery aimed at assessing the economic trends affecting the fishery and developing management strategies which are compatible with the fishery's stage of development (SC-CAMLR-XVII, Annex 4, paragraph 2.9).
- 2.5 In response to this request, it was reported that the average wholesale price of krill from the Sydney Fish Market ranged between A\$2.65 and A\$6.91 per kg in the period between 1992 and 1999 (WG-EMM-00/25, Table 4). However, the Scientific Committee noted that information on krill prices from markets where larger quantities of krill were frequently traded was still not available.
- 2.6 Japan indicated that economic information relative to its krill fishery was complicated and was considered confidential by its fishery. The Scientific Committee acknowledged the need to protect trade information; however, much of the information it needed to manage the fishery was public information. The Scientific Committee reiterated the need for economic information from all Members associated with the krill fishery.

Conversion Factors

- 2.7 At last year's meeting the Scientific Committee noted WG-EMM's discussion of conversion factors (CFs) used to estimate the total catch of krill and that the Japanese had provided descriptive information (SC-CAMLR-XVIII, paragraph 2.5). However, there is still little quantitative information on the exact conversion rates relating krill green weight to different products from the various fishing fleets, fishing areas or seasons.
- 2.8 The Scientific Committee agreed that confidentiality of fisheries on CF data may be an issue, however, some data were available in the literature and these might allow a more rigorous

approach to estimating CFs. For example, Yoshida (1995) which provides economic information and CFs for *Euphausia pacifica* may provide valuable information relevant to *E. superba*.

2.9 Dr Everson also indicated that biochemical composition in krill compared to krill products may yield information relevant to CFs (e.g. there is a narrow tolerance of water 0associated to krill meal which can be examined to determine CFs). Consequently, the Scientific Committee supported WG-EMM's approach to task a small subgroup, convened by Dr Everson (Annex 4, paragraph 2.9) to take the matter of CFs further during the intersessional period.

Fish Catches (All Species from Licensed Fisheries)

- 2.10 Catches reported from the Convention Area during the 1999/2000 split-year are presented in Tables 3 and 4. The total reported catch of all finfish in the Convention Area was 19 283 tonnes. This was slightly greater than the 18 094 tonnes caught during the 1998/99 split-year. The major catches of finfish in 1999/2000 include: 8 892 tonnes in Subarea 48.3, 5 214 tonnes in Division 58.5.1, 2 665 tonnes in Division 58.5.2, 854 tonnes in Subarea 58.6, and 869 tonnes in Subarea 88.1.
- 2.11 The Scientific Committee also drew the attention of the Commission to the catch information for individual species given in SC-CAMLR-XIX/BG/1 Rev. 1 and CCAMLR-XIX/BG/5 Rev. 1. The Scientific Committee recognised that distillation of these papers into summary paragraphs in its report is a difficult task and requested that the Commission consider how it would wish catches be reported to the Commission through the Scientific Committee report. It also requested that WG-FSA consider at its next meeting how best to present catch information in line with the advice of the Commission.
- 2.12 It was noted that the fishery for *C. gunnari* in Subarea 48.3 had exceeded the catch limit of 4 036 tonnes by 74 tonnes (Annex 5, Table 1). This was attributable to late reporting of catch data to the Secretariat and a consequential late closure of the season. It was agreed that better adherence to the reporting requirements should occur so that catch limits are not routinely exceeded.
- 2.13 Although the Scientific Committee does not normally elicit responses from Members concerning their intention to participate in established finfish fisheries, it was encouraged to hear that Brazil had informed the Commission of its intention to enter the *Dissostichus eleginoides* fishery in Subarea 48.3 for the first time. Likewise, the UK also expressed the expectation that it will have three to four vessels participating in the same fishery and, in addition, one in the experimental pot fishery for *D. eleginoides*.

Reported Catches for *Dissostichus* spp.

2.14 The total green-weight landings of *Dissostichus* spp. for the 1999/2000 split-year from the licensed fishery was estimated as 14 441 tonnes. This was a decrease compared to the previous split-year (17 558 tonnes). Reported catches from waters outside the Convention Area are given in Table 5 and totalled 11 553 tonnes. This gave a reported total of 25 994 tonnes (Annex 5, paragraph 3.19).

Estimates of Catch and Effort from IUU Fishing

2.15 WG-FSA used the approach adopted at its 1998 meeting to estimate the magnitude of IUU fishing effort and catches of *Dissostichus* spp. in various subareas and divisions during the 1999/2000 split-year. The results of this analysis indicate that the estimated unreported catch for all subareas and divisions in the Convention Area was 6 546 tonnes (Annex 5, Table 5). This compares to an estimated IUU catch of 4 913 tonnes in the 1998/99 split-year and 22 415 tonnes in 1997/98.

- 2.16 The Scientific Committee recognised that estimating IUU catches has become increasingly more difficult, primarily due to transhipments on the high seas which are difficult to track through the sources available to its working group. Consequently, estimates of IUU catches are likely to be underestimates of the true catches to an unknown extent.
- 2.17 The Scientific Committee noted that the IUU fishery appears to be concentrated in Area 58. However, up to four Argentinian vessels were known to have fished illegally in Subarea 48.3. In Area 58, the IUU fishery targets known plateaux or topographic features, in particular the Kerguelen Plateau (Kerguelen and Heard Islands) or the area around Crozet Islands. The oceanic banks (Ob and Lena, Division 58.4.4) and Africana/Del Cano Rise (Subarea 58.6) are also subject to IUU fishing.
- 2.18 Mauritius remains the primary site for the landing of IUU-caught fish, in particular after May 2000 when the Catch Documentation Scheme for *Dissostichus* spp. (CDS) came into force. The implementation of the CDS appears to be having other impacts on IUU fishing, with indications that fish without CDS papers are sold at a discounted price.
- 2.19 With the advent of CDS data as an additional information source, the Secretariat was tasked with reconciling estimated IUU catches with reported catches intersessionally. This will serve as a preliminary assessment in developing further data with which to track IUU fishing.
- 2.20 The Ukraine alerted the Scientific Committee to the fact that there were reports that a substantial trawl fleet currently operating in the Indian Ocean may relocate to the Southern Ocean once they deplete fish stocks now being fished.
- 2.21 France reported IUU fishing vessels which fish on the Kerguelen and Crozet plateaux are very aggressive and endanger legal fishing vessels.
- 2.22 The Scientific Committee concluded that IUU fishing compromises the ability of CCAMLR to manage its fisheries. However, it noted that to date estimates of IUU catches had been factored into assessments of *Dissostichus* spp. potential yield (especially *D. eleginoides* in Subarea 48.3 and Division 58.5.2).
- 2.23 Chile indicated its registered vessels are required to carry an automatic vessel positioning device which prevents them from participating in IUU fishing. Further expansion of this requirement by other countries, as is required by Conservation Measure 148/XVII, would greatly reduce the IUU fishing effort.
- 2.24 With regard to IUU fishing, the Scientific Committee agreed that it was important for observers to record and report sightings of vessels fishing in the Convention Area. However, observer sightings must be factual and not accusatory. Therefore, it was agreed to develop a standard form of recording this information. An example is attached as Annex 6 and will be provided to observers (via technical coordinators) to test in the field during the forthcoming season. The matter will be reviewed by the Scientific Committee at its next meeting.

Crabs

- 2.25 No fishing for crab species occurred in the Convention Area during the 1999/2000 season.
- 2.26 The USA and Uruguay had notified their intention to fish for crabs in Subarea 48.3 during the 2000/01 season. The US vessel has already fulfilled the requirement of an experimental harvest regime set out in Conservation Measure 150/XVIII, whereas the Uruguayan vessel has not.
- 2.27 At the meeting, the UK also indicated their intention to participate in the crab fishery in Subarea 48.3 during the 2000/01 season.

Squid

- 2.28 No fishing for squid occurred in the Convention Area during the 1999/2000 season.
- 2.29 The UK and the Republic of Korea have resubmitted a joint proposal to conduct an exploratory fishery on $Martialia\ hyadesi$ in Subarea 48.3 during the 2000/01 season.