SCIENTIFIC COMMITTEE

4.1 The Chair of the Scientific Committee, Dr D. Agnew (UK) presented the report of the Scientific Committee (SC-CAMLR-XXIX). The Commission thanked Dr Agnew for the comprehensive presentation of his report (CCAMLR-XXIX/BG/50) noting that this had greatly assisted consideration of the many items in the report. Dr Agnew thanked the many delegations that had contributed to rapporteuring of the meeting.

4.2 The Commission noted the Scientific Committee's general recommendations, advice, research and data requirements. The Commission also discussed substantive matters arising from the Committee's deliberations under various sections of its agenda, marine debris and incidental mortality (section 6); marine protected areas (section 7); illegal, unreported and unregulated (IUU) fishing (section 9); CCAMLR Scheme of International Scientific Observation (section 10); and new and exploratory fisheries (section 11).

Intersessional activities

4.3 The Commission noted the five intersessional meetings of the Scientific Committee during 2010 (SC-CAMLR-XXIX, paragraph 1.8) and joined the Scientific Committee in thanking the conveners and participants in these meetings for their contributions to the work of CCAMLR. Members which had hosted meetings were also thanked for their logistical and administrative support.

Advances in statistics, assessments, modelling and acoustic surveys

4.4 The Commission endorsed the reports of the Working Group on Statistics, Assessments and Modelling (WG-SAM) and the Subgroup on Acoustic Survey and Analysis Methods (SG-ASAM) and noted that Australia, UK and the USA intended to apply the methods agreed at SG-ASAM to the reanalysis of surveys in Area 58 and Subareas 48.3 and 48.1 respectively to provide advice on krill biomass and sustainable yield (SC-CAMLR-XXIX, paragraphs 2.1 to 2.6).

Harvested species

Krill resources

4.5 In 2008/09, five Members harvested 125 826 tonnes of krill from Subareas 48.1, 48.2 and 48.3 (SC-CAMLR-XXIX, Table 1).

4.6 In 2009/10, six Members fished for krill in Subareas 48.1, 48.2 and 48.3 and most of the catch was taken in Subarea 48.1 (SC-CAMLR-XXIX, Table 2). The reported total catch to 24 October was 211 180 tonnes (China 1 956 tonnes; Japan 29 919 tonnes; Republic of Korea 43 805 tonnes; Norway 120 429 tonnes; Poland 7 007 tonnes; and Russia 8 065 tonnes).

4.7 The krill fishery in Subarea 48.1 was closed when the catch reached 99.8% of the trigger level for the subarea (155 000 tonnes). The catch in Subarea 48.1 was the highest ever recorded in that subarea, and this was the first time that a subarea had been closed because catches had reached one of the apportioned trigger levels introduced in 2009 (Conservation Measure (CM) 51-07).

4.8 The Commission noted that the current requirement for vessels to begin reporting catches at 10-day intervals once the catch reaches 80% of the trigger level for Area 48 (CM 23-06) was not consistent with the spatial allocation of the trigger level among subareas. However, the closure of the krill fishery in Subarea 48.1 had occurred efficiently, principally because of the voluntary reporting of catches at five-day intervals by the vessels fishing in that subarea at the time of the closure.

4.9 The Commission agreed that CM 23-06 be modified to reflect that the 80% level (and subsequently the 50% level) in CM 23-06 should apply to the subarea-specific trigger levels, and that once this level had been reached, a five-day reporting interval should be adopted (SC-CAMLR-XXIX, paragraph 3.6).

4.10 The Commission also noted that, in accordance with CM 23-06 (paragraph 5), the requirement for reporting catch and effort at five-day intervals in Subarea 48.1 would now be triggered when the catch reached 50% of the trigger level in that subarea.

4.11 The Commission also noted the urgency of completing its work on the spatial allocation of catch limits for SSMUs in Area 48, and implementing a feedback management strategy for the krill fishery. The Scientific Committee has identified this task in its program of work for 2011 to 2013 (SC-CAMLR-XXIX, Table 7).

4.12 Notifications for krill fishing in 2010/11 were received from seven Members covering 15 vessels with a notified total predicted catch of 410 000 tonnes (SC-CAMLR-XXIX, Table 3); there was no notification for exploratory krill fisheries. The Commission noted the utility of the notification scheme to its work. It also noted that notifications submitted in languages other than English in 2010 were translated into English by the Secretariat prior to the meeting of WG-EMM so that these could be appropriately assessed by the Working Group (SC-CAMLR-XXIX, paragraph 3.7).

4.13 The Commission endorsed the Scientific Committee's recommendation that standardisation of methods for estimating the green weight of krill caught is urgently required to achieve more accurate estimates of actual catches and adopted an amendment to CM 21-03 to require submission of information concerning the estimate of green weight (SC-CAMLR-XXIX, paragraph 3.9).

4.14 In response to a question from the EU regarding the reporting of krill green weight, the Commission reviewed the methods used by Members as reported in their notifications for 2010/11. The methods included direct estimation, measurement by volume, codend measurement, use of conversion factors, flow scale measurement and motion-compensated scales.

4.15 The Commission agreed that further information and data were needed in order for the Scientific Committee to consider this matter, and it was agreed that fishing vessels be required to measure their krill catch as green weight.

4.16 The Commission noted the recent change in the pattern of krill fishing operations with the catches coming mostly from Subarea 48.2 in 2008/09 and from Subarea 48.1 in 2009/10. The fishery had concentrated around Bransfield Strait in Subarea 48.1 in 2009/10 and the catch from this region was an order of magnitude higher than catches reported from this region in the past. Additionally, the krill fishery now appears to be largely a winter operation (SC-CAMLR-XXIX, paragraphs 3.10 and 3.11).

4.17 The Commission noted the continued work on methods for estimating the mortality of krill escaping from trawl nets (SC-CAMLR-XXIX, paragraph 3.13).

4.18 The Commission thanked Ukraine for offering to deploy scientific observers on krill fishing vessels in 2010/11 in order to trial the proposed method for estimating krill escape mortality and further advance this matter (see also CCAMLR-XXIX/45).

4.19 The Commission noted that, although the Scientific Committee's advice remains that 100% observer coverage of vessels is the fastest way to develop a scientific understanding of the fishery, data collected during an initial two-year program with 50% systematic observer coverage could characterise underlying variability and assist with the design of an observer program in the long term (SC-CAMLR-XXIX, paragraphs 3.15 to 3.22).

4.20 The Commission endorsed the Scientific Committee's advice for observer coverage in 2010/11 and 2011/12, and agreed to divide vessels into two groups and divide seasons into two periods (Option 1, SC-CAMLR-XXIX, paragraphs 3.16 to 3.18 and Table 4), whereby:

- (i) 100% of vessels in the first vessel group is observed in the first period of 2010/11 and the second period of 2011/12;
- (ii) 100% of vessels in the second group is observed in the second period of 2010/11 and the first period of 2011/12;
- (iii) 20% of hauls are observed on each observed vessel in accordance with the priorities and methodologies as set out in the CCAMLR *Scientific Observers Manual*.

4.21 As notifications for 2011/12 are not currently available, the Commission agreed that observations in 2011/12 should correspond with the coverage outlined in paragraph 4.20, including:

- (i) at least 50% of all vessels (and at least 50% of vessels of each Member participating in the fishery where that Member has two or more vessels participating in the fishery simultaneously) should be observed in each period during which they fish;
- (ii) any vessel that fished in 2010/11 and did not carry an observer should carry an observer in 2011/12 irrespective of the period in which it fishes.

4.22 The Commission noted the observer coverage outlined above may deliver, over a twoyear period, at least 50% coverage, and sufficient scientific data to allow the Scientific Committee to do its work (SC-CAMLR-XXIX, paragraph 3.20). Further, some Members had agreed to deploy scientific observers on all fishing trips. Accordingly, the Commission agreed to extend the requirements of CM 51-06 until 2011/12 to complete the deployment scheme; these requirements will be reviewed by the Commission at its meeting in 2012.

4.23 The Commission thanked Members for the progress made with scientific observations on krill fishing vessels. The incremental approach to the deployment of scientific observers will provide essential information for use in the development of the feedback management strategy for the krill fishery.

4.24 The Commission noted Argentina, Germany and Norway's intention to develop new surveys on krill, particularly in Subareas 48.1 and 48.2 (SC-CAMLR-XXIX, paragraphs 3.23 to 3.27). In addition, the Scientific Committee and its working groups will develop technical protocols for the calibration, collection, storage and analysis of data from acoustic surveys of krill from fishing vessels as a matter of priority (SC-CAMLR-XXIX, paragraph 3.27).

4.25 The Commission thanked Argentina, Germany and Norway for their commitment to conduct scientific research in support of the work of the Scientific Committee, and the Commission encouraged other Members to follow these initiatives.

4.26 ASOC congratulated Argentina, Germany and Norway on their initiatives for conducting research on krill, and joined the Commission in urging other Members to engage in this work, including consideration of a repeat synoptic survey of krill in Area 48.

4.27 The Commission noted the Scientific Committee's proposal that the General Science Capacity Special Fund be used to facilitate analysis by SG-ASAM of acoustic data arising from research conducted by fishing vessels (SC-CAMLR-XXIX, paragraph 3.57; see section 15).

4.28 The Commission endorsed the Scientific Committee's advice on the use of the full SDWBA model for calculating B_0 estimates for krill. The revised B_0 estimate for Subareas 48.1, 48.2, 48.3 and 48.4 was 60.3 million tonnes with a sampling CV of 12.8%, and this represented the best estimate of krill biomass derived from the CCAMLR-2000 Survey (SC-CAMLR-XXIX, paragraphs 3.28 and 3.29).

4.29 The Commission endorsed the Scientific Committee's revised precautionary catch limit for krill of 5.61 million tonnes for Subareas 48.1 to 48.4 and agreed that this value would be appropriate for a revision of CM 51-01. The Commission noted that the current trigger level is not linked to the assessment of B_0 and would remain at 620 000 tonnes for Subareas 48.1 to 48.4 (SC-CAMLR-XXIX, paragraph 3.30).

4.30 The Commission noted that the revised implementation of the SDWBA model should also be applied to krill biomass estimates for Divisions 58.4.1 and 58.4.2 to generate new estimates of B_0 and precautionary catch limits. It was agreed that present catch limits for krill in these divisions would remain in force until such reanalysis (SC-CAMLR-XXIX, paragraph 3.31).

4.31 The Commission also noted the need to investigate the potential impact of climate change on recruitment variability, and agreed that a full review of the influence of recruitment variability on the calculation of sustainable yield be undertaken (SC-CAMLR-XXIX, paragraph 3.32).

4.32 The Commission noted the increasing interest in krill research originating from outside the Scientific Committee and its working groups, as evidenced by the recent Ukrainian–Russian seminar (CCAMLR-XXIX/BG/35) and the EU's forthcoming workshop on the impact of environmental change and increasing human exploitation on Antarctic krill and to discuss potential implications for CCAMLR's ecosystem-based management approach (11 to 15 April 2011, Texel, The Netherlands).

Toothfish resources

4.33 In 2008/09, 10 Members fished for toothfish in Subareas 48.3, 48.4, 48.6, 58.6, 58.7, 88.1 and 88.2 and Divisions 58.4.1, 58.4.2, 58.4.3a, 58.4.3b, 58.5.1 and 58.5.2 and reported a total harvest of 15 783 tonnes (SC-CAMLR-XXIX, Table 1).

4.34 In 2009/10, 11 Members fished for toothfish in Subareas 48.3, 48.4, 48.6, 58.6, 58.7, 88.1 and 88.2 and Divisions 58.4.1, 58.4.2, 58.4.3b, 58.5.1 and 58.5.2; Japan also conducted research fishing in Divisions 58.4.4a and 58.4.4b. The reported total catch to 24 September was 11 860 tonnes (SC-CAMLR-XXIX, Table 2).

4.35 In addition, catches reported under the CDS indicated that 9952 tonnes of *Dissostichus* spp. were taken outside the Convention Area in 2009/10 (to October 2010) compared with 12 806 tonnes in 2008/09 (SC-CAMLR-XXIX, Annex 5, Table 7). Catches in both seasons were taken mostly in Areas 41 and 87.

4.36 The Commission supported Ukraine's proposal that Members fishing for *D. eleginoides* outside the Convention Area be encouraged to provide information on these activities and associated research for review by WG-FSA and the Scientific Committee. The reporting format could follow the format used in WG-FSA's fishery reports.

4.37 Estimates of catches from IUU fishing for *Dissostichus* spp. inside the Convention Area were discussed under Item 9.

4.38 The Commission noted the Scientific Committee's advice on the tagging of *Dissostichus* spp., particularly in exploratory fisheries (SC-CAMLR-XXIX, paragraphs 3.43 to 3.49), and endorsed the recommendations that:

- (i) otoliths from tagged fish be returned with the tags to the Secretariat for storage in order to assist in future confirmation of species identity (SC-CAMLR-XXIX, paragraphs 3.55 to 3.57);
- (ii) the Secretariat translate existing signs and information about the tagging program into the languages commonly spoken by crews on board vessels active in exploratory fisheries, in addition to the CCAMLR official languages.

4.39 In agreeing paragraph 4.38(ii) above, the Commission reiterated that the obligations and responsibilities for compliance lie with the Members and their flagged vessels. As such, Members may be able to assist with these translation requirements. The Commission agreed that the translation of information about tagging programs be reviewed at its meeting in 2011.

4.40 The Commission encouraged the continued work on the biology and ecology of target and by-catch species, including the further development of Members' capacity to age individuals using otoliths (SC-CAMLR-XXIX, paragraphs 3.50 to 3.56). The Scientific Committee had proposed that the coordination of age determination using otoliths from exploratory fisheries may be a suitable project for consideration under the General Science Capacity Special Fund (see section 15).

4.41 The Commission noted that the primary aim of this proposal was to clear the backlog of otoliths and provide WG-FSA and the Scientific Committee with information required for assessing *Dissostichus* spp. The Commission recognised that some aspects of this work may provide opportunities for capacity building among some Members.

4.42 The Commission recalled that the Scientific Committee has implemented biennial assessments for *D. eleginoides* in Subarea 48.3 and Division 58.5.2, subject to the conditions of the biennial assessment procedure (SC-CAMLR-XXVIII, paragraphs 4.81, 4.82, 4.108 and 4.109). The latest assessments were conducted in 2009, and WG-FSA did not carry out assessments for these stocks in 2010.

4.43 The Commission endorsed the Scientific Committee's management advice on toothfish fisheries (SC-CAMLR-XXIX, paragraphs 3.65, 3.66, 3.74, 3.79 to 3.81, 3.84, 3.88 to 3.90), including:

- (i) the limits for the fishery for *D. eleginoides* in Subarea 48.3 be carried forward for 2010/11, and a revised starting date of 21 April 2011 for the season extension;
- (ii) the continuation of the tagging experiment in Subarea 48.4 with a reduced catch limit for *Dissostichus* spp. of 30 tonnes in Subarea 48.4 South, and a revised catch limit of *D. eleginoides* of 40 tonnes in Subarea 48.4 North;
- (iii) the limits for the fishery for *D. eleginoides* in Division 58.5.2 be carried forward for 2010/11.

4.44 The Commission encouraged the estimation of biological parameters for *D. eleginoides* in the French EEZs in Division 58.5.1 and Subarea 58.6, the development of a stock assessment for these fisheries, the continuation of the tagging program, and consideration of by-catch mitigation measures, including the application of by-catch move-on rules similar to those in use in other CCAMLR fisheries (SC-CAMLR-XXIX, paragraphs 3.79, 3.80, 3.88 and 3.89).

4.45 The fishery in Division 58.5.1 was the largest fishery for *D. eleginoides* in the Convention Area, and the Commission looked forward to receiving management advice for this fishery in accordance with Article II.

4.46 The Commission also encouraged the use of CCAMLR decision rules in the assessment of the fishery for *D. eleginoides* in the South African EEZ in Subareas 58.6 and 58.7 (SC-CAMLR-XXIX, paragraph 3.94), and noted that South Africa is considering the adoption of an operational management procedure approach (SC-CAMLR-XXVII, Annex 7, paragraphs 6.1 to 6.3).

Icefish resources

4.47 In 2008/09, three Members fished for icefish in Subarea 48.3 and Division 58.5.2 and reported a total catch of 1 916 tonnes (SC-CAMLR-XXIX, Table 1).

4.48 In 2009/10, three Members fished for icefish in Subarea 48.3 and Division 58.5.2 and the catch reported to 24 September was 378 tonnes (SC-CAMLR-XXIX, Table 2).

4.49 The Commission endorsed the Scientific Committee's management advice on icefish fisheries (SC-CAMLR-XXIX, paragraphs 3.99, 3.103 to 3.105):

- (i) the catch limit for *Champsocephalus gunnari* in Subarea 48.3 should be set at 2 305 tonnes in 2010/11 and 1 535 tonnes in 2011/12;
- (ii) the catch limit for *C. gunnari* in Division 58.5.2 should be set at 78 tonnes in 2010/11.

4.50 The Commission urged Members to complete the work outstanding from the Workshop on Assessment Methods for Icefish (SC-CAMLR-XX, Annex 5, Appendix D) to evaluate whether the short-term projection method could be problematic for stocks at very low, or of highly variable, abundance because the method will always project a precautionary yield. The Commission also noted that this work will contribute to addressing the PRP recommendation whether a rebuilding strategy needs to be employed for such stocks when they have low levels of biomass. Members were encouraged to work on this issue for Division 58.5.2 and Subarea 48.3 as a matter of priority.

Other fishery resources

4.51 The Commission endorsed the Scientific Committee's management advice on other fisheries (SC-CAMLR-XXIX, paragraphs 3.107, 3.110, 3.113 and 3.115):

- (i) the prohibitions of finfishing in Subareas 48.1 and 48.2 remain in force;
- (ii) there was no new information available on stock status of crabs in Subarea 48.3.
 One vessel (Russia) fished for crabs in 2009/10 from August to 15 October 2010 (SC-CAMLR-XXIX, paragraph 3.111);
- (iii) the conservation measures for the exploratory crab fisheries in Subareas 48.2 and 48.4 not be renewed for 2010/11.

4.52 The Commission noted that Russia has indicated its intention to notify to fish for crab in Subarea 48.3 in 2010/11 (SC-CAMLR-XXIX, paragraph 3.112). Russia confirmed that it has submitted its notification for such a fishery to the Secretariat.

Fish and invertebrate by-catch

4.53 The Commission noted that there had been some difficulty in interpretation of reporting requirements for by-catch that is retained when caught south of 60°S, as required

under CMs 26-01, 41-04 and 41-11, and subsequently discarded as offal when the vessel is north of 60°S. The Commission agreed that further guidance on reporting requirements be provided to both vessels and observers by way of additional detail in the instructions on the relevant data reporting forms (SC-CAMLR-XXIX, paragraphs 3.116 and 3.117).

4.54 The Commission noted the general success of the initiatives undertaken during the Year-of-the-Skate and the need to continue to collect data on tagged skates. It endorsed the Scientific Committee's advice to (SC-CAMLR-XXIX, paragraph 3.118):

- (i) remove the mandatory requirement to tag skates in new and exploratory fisheries;
- (ii) encourage Members wishing to continue tagging skates to use the tagging protocols developed during the Year-of-the-Skate, including tagging with T-bar tags;
- (iii) replace the existing text in CM 33-03, paragraph 4, with a requirement that on all vessels, all skates must be brought on board or alongside the hauler to be checked for tags and for their condition to be assessed.

4.55 The Committee also endorsed the advice to revise the text in paragraph 2(vi) of CM 41-01, Annex C, to include recovered otoliths in the tag photographs and additional requirements for skates (SC-CAMLR-XXIX, paragraph 3.119).

4.56 The Commission noted that the Scientific Committee was considering a system of incentives to encourage crew to continue to check skates for tags (SC-CAMLR-XXIX, paragraph 3.120). Such incentives may also assist with the recovery of tagged toothfish where they are captured by vessels outside the Convention Area. The Commission agreed that the findings from WG-FSA and the Scientific Committee should be referred to SCIC for further consideration.

4.57 The Commission noted that the potential for poor reporting of tagged toothfish and skates was an issue that should be brought to the attention of SCIC. It also noted that the Scientific Committee had requested that the Commission consider methods for improving the reporting of tagged skates and tagged toothfish recaptured outside the Convention Area (SC-CAMLR-XXIX, paragraph 3.121).

4.58 The Commission endorsed the Scientific Committee's advice that the move-on rules for macrourids and rajids in Subarea 48.4 should remain unchanged in 2010/11 (SC-CAMLR-XXIX, paragraph 3.123).

Climate change

4.59 The Commission noted the findings of the SCAR Antarctic Climate Change and Environment (ACCE) report and the recommendations of the Scientific Committee on potential responses of CCAMLR to the protection of sites and species that might be particularly vulnerable to climate change (SC-CAMLR-XXIX, paragraphs 8.2 to 8.8).

4.60 Norway and the UK recalled that the ACCE report was extremely important for CCAMLR as it highlighted the uncertainties in prediction of future scenarios and underpinned the need for ongoing monitoring and the precautionary approach.

4.61 The Chair of the Scientific Committee noted that, while there was no substantive advice on the issue of climate change at this meeting, it remains an important part of the agenda of the Committee (paragraph 13.8).

Scientific research exemptions

Ob and Lena Banks Division 58.4.4

4.62 The Commission agreed that a catch limit of 53 tonnes was appropriate for the survey by Japan in SSRUs 5844B and C (Ob and Lena Banks) in 2010/11 as a research exemption under CM 24- 01^{1} .

Subareas 88.2 and 88.3

4.63 The Commission noted the discussion of notifications submitted by the Republic of Korea and Russia to conduct research in Subareas 88.2 and 88.3. It endorsed the recommendation that clearer advice be developed with respect to the submission of proposals for research fishing, taking account of the general principles and requirements for CCAMLR-sponsored research (SC-CAMLR-XXIX, paragraphs 9.22 and 9.23).

4.64 Some Members recalled the advice from the Scientific Committee that the research fishing proposed in the closed areas in Subareas 88.2 and 88.3 was unlikely to lead to an assessment noting that, amongst other considerations, tagging studies over the spatial scale proposed would not provide sufficient information for an assessment.

4.65 The Republic of Korea informed the Commission that it had learned and benefited from the discussion of its research proposal during the Scientific Committee and Commission meetings and acknowledged the helpful advice that it had been given. Accordingly, Korea proposed to work with other Members to develop a research proposal for submission to WG-SAM in 2011 or some time in the future and would not engage in research fishing in 2010/11.

4.66 Russia made the following statement:

'In accordance with Conservation Measure 24-01, the Russian Federation submitted to the CCAMLR Secretariat a notification which had been properly prepared and included a marine research plan for Subarea 88.3.

Following the abovementioned CCAMLR conservation measure, the plan has been considered by WG-FSA, the Scientific Committee and the Commission of CCAMLR.

¹ The Secretariat circulated the revised research plan to Members following the meeting.

The plan for conducting the above research is fully consistent with the provisions of the CCAMLR conservation measures, the CAMLR Convention, and it also takes into account the principles of the United Nations Convention on the Law of the Sea, specifically Articles 238 and 240 of that Convention.

However, some countries have expressed their concerns about the intent of the Russian Federation to conduct the scientific marine research in Subarea 88.3.

Despite the fact that CCAMLR Conservation Measure 24-01 does not require the scientific research plans to pass through the procedure of being approved by the Commission, the Russian Federation took into consideration the proposals put forward during the meeting by the countries concerned, in order to incorporate them when implementing the marine research program in the 2010/11 season.

In addition, the Russian Federation would presume that in this case, and in future when considering the issues of scientific research in the CAMLR Convention Area, the countries will strictly follow the provisions of the CCAMLR conservation measures, the CAMLR Convention, and the principles of the United Nations Convention on the Law of the Sea, including the ones established in Article 239 of that Convention, and will refrain from assessments that cast doubt on the ability of a country to conduct scientific marine research in an effective manner.'

4.67 Russia noted that the research proposed on the Russian vessel is designed to be a multi-year program and to provide data for an assessment, and is not proposing a large catch. Russia stressed that its proposal was for research and that it would be pleased to work with Members to improve the implementation of the research in the coming season.

4.68 Russia presented a research proposal for Subareas 88.2 and 88.3 which was considered by WG-FSA and the Scientific Committee. Following this consideration, and comments made by the Scientific Committee (SC-CAMLR-XXIX, paragraphs 9.15 to 9.22), Russia incorporated these recommendations into its research plan for the 2010/11 fishing season and submitted an explanatory note clarifying the research plan objectives to the Secretariat.

4.69 Russia also noted that it was undertaking research in SSRU 882A in 2010/11 as an exemption under CM 24-01, paragraph 2, with catches of up to 10 tonnes.

4.70 The Commission noted the modified research plan provided by Russia², and agreed that this satisfactorily concluded the review required under CM 24-01, paragraph 3(a). The Commission agreed that a catch limit of 65 tonnes was appropriate for the survey by Russia in SSRUs 883A–C as a research exemption under CM 24-01.

Small catches in research

4.71 The Commission endorsed the proposed changes to CM 24-01 to exempt small catches taken during scientific research from the within-season reporting requirements and to allow the routine use of small gillnets in multi-year scientific research programs without the need to seek annual approval by the Commission (SC-CAMLR-XXIX, paragraphs 9.26 and 9.28).

² The Secretariat circulated the revised research plan to Members following the meeting.

Secretariat supported activities

4.72 The Commission endorsed the proposal for an independent review of the Secretariat's data management systems (CCAMLR-XXIX/13), noting that such a review was expected to assist in the further development of the Secretariat's data services, including the dissemination of web-based metadata and related information (SC-CAMLR-XXIX, paragraph 14.2, Annex 4, paragraphs 6.1 and 6.2 and Annex 8, paragraph 12.2).

4.73 The Commission endorsed the decisions of the Scientific Committee in relation to publish future volumes of *CCAMLR Science* in English only and to delegate the granting of permissions to cite working group papers to the Scientific Committee representative of the lead author responsible for the original submission (SC-CAMLR-XXIX, paragraphs 14.8 to 14.10).

Scientific Committee activities

4.74 The Commission noted the important discussions undertaken in the Scientific Committee on its work over the next 2 to 3 years and endorsed the three priority areas of (i) feedback management of the krill fishery, (ii) assessment of toothfish fisheries (especially in exploratory fisheries), and (iii) MPAs and the allocation of tasks to its working groups (SC-CAMLR-XXIX, paragraph 15.1 and Table 7).

4.75 The Commission appreciated the progress made by the ad hoc Technical Group for At-Sea Operations (TASO) in respect of developing an accreditation scheme for participation in the CCAMLR Scheme of International Scientific Observation. It noted that, while there would no longer be a requirement for regular meetings of TASO, there was still work to be completed on developing the terms of reference for a review panel to accredit participating programs in consultation with the Chairs of the Scientific Committee and SCIC (see paragraph 10.3 and SC-CAMLR-XXIX, paragraph 15.2).

4.76 The Commission endorsed the work plans for the Scientific Committee and its subsidiary working groups (SC-CAMLR-XXIX, paragraph 15.14), including the following meetings in the 2010/11 intersessional period:

- WG-SAM (Busan, Republic of Korea, 11 to 15 July 2011) (Co-conveners, Drs A. Constable (Australia) and C. Jones (USA));
- WG-EMM (Busan, Republic of Korea, 11 to 22 July 2011) (Convener, Dr G. Watters (USA));
- Workshop on Marine Protected Areas (Brest, France, 29 August to 2 September 2011) (Co-conveners, Dr P. Penhale (USA) and Prof. P. Koubbi (France));
- WG-IMAF at CCAMLR Headquarters, Hobart, Australia, from 10 to 14 October 2011 (Convener, Ms K. Rivera (USA));
- WG-FSA at CCAMLR Headquarters, Hobart, Australia, from 10 to 21 October 2011 (Convener, Dr Jones).

4.77 The Commission endorsed the terms of the CCAMLR Scientific Scholarship Scheme in SC-CAMLR-XXIX, Annex 9, and noted that a review after five years would be appropriate to assess the performance of the scheme. While the scheme should be funded from the General Science Capacity Special Fund, the long-term nature of the scheme was dependent on additional funding from the Commission and Members (SC-CAMLR-XXIX, paragraphs 15.11 and 15.12).

4.78 In highlighting the importance of capacity building, the Commission recalled that the General Science Capacity Special Fund was established at CCAMLR-XXVIII following donations from Norway and COLTO (CCAMLR-XXVIII, paragraphs 16.7 and 16.12), with a further contribution of A\$10 000 from Australia during the intersessional period (COMM CIRC 10/69 refers), and encouraged other Members, especially fishing nations, to make contributions to this fund.

4.79 The EU noted that there was a need for the Commission to ensure that the General Science Capacity Special Fund had sufficient funds to secure the future of the CCAMLR Scientific Scholarship Scheme and informed the Commission that it intended to make a contribution of \notin 50 000 this year.

4.80 The Commission thanked the EU for this generous contribution.

4.81 The Commission noted that under the terms of the CCAMLR Scientific Scholarship Scheme, candidates are sought from all Members and that particular preference will be given to early career scientists from developing countries.

4.82 The Commission also noted that South Africa is leading a multi-national proposal to the Global Environment Facility (GEF), under its International Waters portfolio to support science and research in the Southern Ocean, particularly in relation to capacity building and engagement in CCAMLR initiatives, for Members that are eligible for GEF funding (SC-CAMLR-XXIX, paragraphs 17.1 and 17.2). Such a project would build capacity in Antarctic and Southern Ocean science and contribute to research on a range of issues in areas beyond national jurisdiction. The Commission thanked South Africa for informing it of this initiative and looked forward to reviewing the full proposal in 2011.

4.83 Following the consideration by the Scientific Committee of a potential mechanism to facilitate observer involvement in the working groups, the Commission noted that the participation of observers may increase transparency and scientific contribution. The Commission agreed that the review by the Scientific Committee, identified in SC-CAMLR-XXIX, paragraph 15.19, should also include consideration of the procedures for the participation of observers in technical groups of other organisations, as well as a criteria for assessing scientific contributions.

4.84 The Commission noted the Scientific Committee's decision that all observers invited to SC-CAMLR-XXIX would be invited to participate in SC-CAMLR-XXX (SC-CAMLR-XXIX, paragraph 15.16).

4.85 The Commission noted that the Scientific Committee had agreed to amend Rule 21 of its Rules of Procedure in order to clarify the period of time Members have to respond to a

recommendation from the Chair of the Scientific Committee regarding the participation of an observer not considered at the last meeting of the Scientific Committee (SC-CAMLR-XXIX, paragraph 15.17).

4.86 The Commission noted that Prof. Koubbi was elected as the new Vice-Chair of the Scientific Committee and thanked Dr V. Bizikov (Russia) for his contributions as the outgoing Vice-Chair (SC-CAMLR-XXIX, paragraphs 16.1 and 16.2).