NEW AND EXPLORATORY FISHERIES AND RESEARCH FISHING

11.1 The Commission noted that the Scientific Committee and WG-FSA had reviewed progress in assessing the exploratory fisheries for *Dissostichus* spp. (SC-CAMLR-XXX, paragraphs 3.115 to 3.180), and in research fishing conducted in closed fisheries (SC-CAMLR-XXX, paragraphs 9.1 to 9.43). These topics have similar research objectives and requirements, and the Commission agreed to combine these matters for consideration in this section on new and exploratory fisheries.

11.2 There were no new fisheries operating in the Convention Area in 2010/11, and no notifications have been made for new fisheries in 2011/12.

Exploratory fisheries

11.3 Seven exploratory longline fisheries for *Dissostichus* spp. were agreed for 2010/11 (CMs 41-04 to 41-07 and 41-09 to 41-11), and the Commission endorsed the Scientific Committee's advice on these fisheries (SC-CAMLR-XXX, paragraphs 3.115 to 3.121, Table 1), noting that:

- anomalously high CPUEs were reported in SSRU 5841E in the last two seasons and in SSRU 5842E in 2010/11, and the Scientific Committee has requested further investigation by the Secretariat, WG-FSA and Members, to understand the reason for these high values
- (ii) in 2010/11 most vessels released tags continuously at or above the required rates throughout their fishing trips
- (iii) almost all vessels had improved their tagging performance over the last three years, some significantly, and this confirmed that vessels can achieve the required overlap statistic of 60% in 2011/12
- (iv) approximately 14 000 tagged fish have been released in Subareas 48.6 and 58.4, yet there have been only 69 (0.5%) recaptures, and only seven tagged fish were recaptured from these subareas in 2010/11. This is the lowest number of tagged fish recaptured in these subareas since the start of the tagging program, even though catches in 2010/11 in these subareas were higher than in the previous two years.

11.4 The Commission noted that the Scientific Committee, WG-SAM and WG-FSA had focused discussions in 2011 on the exploratory fishery in Subarea 48.6, as well as on exploratory and closed fisheries in Subarea 58.4. The Scientific Committee had referred to these fisheries as 'data-poor exploratory fisheries' (SC-CAMLR-XXX, paragraph 3.122).

11.5 With respect to the high CPUE rates reported in SSRUs 5841E and 5842E, the Commission noted the Republic of Korea's advice to SCIC (Annex 6, paragraph 2.30).

11.6 The Commission also noted that nine Members had notified for exploratory longline fisheries for *Dissostichus* spp. in Subareas 48.6, 88.1 and 88.2 and Divisions 58.4.1, 58.4.2, 58.4.3a and 58.4.3b for 2011/12 (SC-CAMLR-XXX, paragraph 3.116).

11.7 Some Members noted that New Zealand's notifications for the *Antarctic Chieftain* did not reflect the vessel's reflagging history over the previous 12 months, as required in paragraph 5(i) of CM 21-02. New Zealand's notifications for the vessel *Antarctic Chieftain* for exploratory fisheries in the 2011/12 season were consistent with the notifications provided by New Zealand in the past three seasons and no concern had previously been raised. Consistent with the requirements of CM 10-02, New Zealand only authorises vessels flying its flag to operate in CCAMLR exploratory fisheries. New Zealand thanked Ukraine and Russia for raising the issue of ambiguity between CM 10-02 and CM 21-02. New Zealand reported that the vessel *Antarctic Chieftain* reverts to New Zealand flag at the conclusion of its operations in Australian fisheries, and before entering CCAMLR exploratory fisheries. It was further reported that the beneficial ownership of the vessel has remained unchanged since 2008.

11.8 During the meeting, the Republic of Korea withdrew the three Insung-owned vessels notified in exploratory fisheries in Division 58.4.1 and Subareas 48.6, 88.1 and 88.2 in 2011/12 (*Insung No. 3, Insung No. 5, Insung No. 66*). Korea confirmed that these vessels would not operate in the Convention Area in 2011/12. Korea also advised the Commission that this withdrawal would give a strong signal to Korean fishing vessel operators to comply with all the conservation measures.

11.9 Some Members thanked the Republic of Korea for withdrawing these vessels and reducing the fishing capacity in the exploratory fisheries in Division 58.4.1 and Subareas 48.6, 88.1 and 88.2.

Progress on assessments in exploratory fisheries in Subareas 48.6 and 58.4

11.10 The Commission noted the Scientific Committee's lack of progress on assessments in the exploratory fisheries in Subareas 48.6 and 58.4, and endorsed the advice on this matter (SC-CAMLR-XXX, paragraphs 3.128 to 3.133, 3.137, 3.138 and 3.141), including:

- (i) increasing the number of research hauls and the tagging rates to increase the amount of data and the number of tagged fish available for recapture
- (ii) tagging only fish with a high probability of survival, and collecting data characterising the suitability of captured fish for tagging, including the number of hooking injuries
- (iii) increasing the number of research hauls in fine-scale rectangles in which most tagged fish have been released in the past few years in order to increase the likelihood of tagged fish being recaptured
- (iv) reducing the minimum distance between research hauls from 5 n miles to 3 n miles in order to concentrate effort in locations where tagged fish have been released

 (v) that Members include a detailed research plan in future notifications for exploratory fisheries in these subareas, based on requirements of CM 24-01, Annex 24-01/A, format 2.

11.11 The Commission discussed the progress made by the Scientific Committee, including the following points raised by Members:

- The USA was concerned that, despite fishing activity dating back to the late (i) 1990s and early 2000s, the Scientific Committee has been unable to provide advice on catch limits for the exploratory fisheries for Dissostichus spp. in Subareas 48.6 and 58.4 (the so-called 'data-poor' exploratory fisheries) (SC-CAMLR-XXX, paragraphs 3.146, 3.152, 3.161 and 3.165). In its view, however, the Scientific Committee has made substantial and important progress in providing advice relative to undertaking assessments of these fisheries. It specifically noted SC-CAMLR-XXX, paragraph 2.4, and endorsed the view that 'the primary purpose of research in data-poor fisheries should be to collect data that will lead to a robust estimate of stock status and enable the estimation of precautionary catch limits consistent with CCAMLR decision rules.' It endorsed the Scientific Committee's advice to increase tagging rates, tag and release only 'single-hooked fish in good condition', achieve a minimum tag overlap statistic of 60%, and concentrate 'research hauls' in locations where tagged fish have been previously released (SC-CAMLR-XXX, paragraphs 3.128 to 3.133).
- (ii) The USA was encouraged by, and endorsed, the advice provided in SC-CAMLR-XXX, paragraphs 3.137 and 3.138. In its view, Members wishing to participate in data-poor exploratory fisheries should be provided an opportunity to revise and improve their research fishing proposals on the basis of an intersessional review that occurs prior to the annual meetings of WG-FSA and the Scientific Committee. It noted that the timeline outlined in SC-CAMLR-XXX, paragraph 3.138, provides ample opportunity for Members to revise their research plans, and, importantly, seems more likely to provide plans that, when well implemented, will lead towards assessments for data-poor fisheries.
- (iii) Australia believed that the term 'data-poor exploratory fisheries' was misleading because considerable fishery-based research has been conducted in the fisheries in Subareas 48.6 and 58.4, including the release of over 14 000 tagged fish. It believed that the current progress in assessing these fisheries had been limited by poor research implementation rather than poor research design, and endorsed the Scientific Committee's requirements for future research fishing.
- (iv) The EU indicated that the low recapture rates recorded in Subarea 58.4 were likely to be linked to IUU fishing in this region, and it urged the Commission to further develop measures to deter and eliminate IUU fishing in the Convention Area.
- (v) Japan and the Republic of Korea expressed their concern about the increased requirements for tagging fish in these exploratory fisheries, and in particular the Scientific Committee's advice that only single-hooked fish, hooked in the mouth and with a high probability of survival, shall be tagged and released.

11.12 The Commission also endorsed the Scientific Committee's recommendation that scientific observers be required to collect data from all research hauls to characterise the suitability of captured fish for tagging, including the number of hooking injuries (SC-CAMLR-XXX, paragraph 3.140).

Catch limits for *Dissostichus* spp.

11.13 The Commission noted that the Scientific Committee had been unable to provide new advice on the catch limits in the exploratory fisheries in Subareas 48.6 and 58.4 (SC-CAMLR-XXX, paragraphs 3.146, 3.152, 3.161 and 3.165).

11.14 The Commission endorsed the Scientific Committee's advice on catch limits in Subareas 88.1 and 88.2 (SC-CAMLR-XXX, paragraphs 3.172 to 3.174, 3.176 and 3.177), including the:

- (i) revised catch limit for *Dissostichus* spp. in Subarea 88.1, and consequential changes to the limits in combined SSRUs B, C, G, SSRUs H, I, K and SSRUs J, L
- (ii) protection of the registered VMEs on Admiralty Seamount in Subarea 88.1, SSRU G (see paragraph 5.1 and CM 22-09)
- (iii) provision of 80 tonnes set aside to facilitate the pre-recruit survey in Subarea 88.1 in 2011/12 and 2012/13
- (iv) revised catch limit for *Dissostichus* spp. in Subarea 88.2, revised boundaries of SSRUs in that subarea, and related changes to the catch limits in SSRU H and the combined SSRUs C, D, E, F, G.

11.15 The Commission confirmed that the provision of 80 tonnes for the pre-recruit survey in Subarea 88.1 would be deducted from the catch limit set in combined SSRUs J, L. It also agreed that the survey be limited to 65 sets per year. Gear standardisation, both within and between years, would be a critical factor in the implementation of this survey and this could be best achieved by using the same vessel between years (SC-CAMLR-XXX, paragraph 3.175). Further, the Commission encouraged the Scientific Committee to consider the requirements for extending the pre-recruit survey beyond 2012/13 in order to achieve greater benefits from this research.

11.16 The Commission noted that the Scientific Committee had considered a proposal for the conditional transition of the fishery for *Dissostichus* spp. in the Ross Sea from exploratory to established (SC-CAMLR-XXX, paragraphs 3.179 and 3.180). The Scientific Committee had noted the view of WG-FSA that sufficient information had become available to warrant removal of its exploratory status as it meets the criteria set out for exploratory fisheries in paragraph 1 of CM 21-02. However, there were many elements of the existing conservation measures which had been essential for reaching this status and whose retention would be essential in the future, and the Scientific Committee had requested advice from WG-FSA on the key elements of the data collection, research plan, and assessment procedures required to ensure the continued assessment and management of the fishery.

Research fishing in closed fisheries or fisheries with zero catch limits

11.17 The Commission noted that the Scientific Committee had considered proposals for research fishing under CM 24-01 in closed fisheries or fisheries with zero catch limits. These proposals were considered with reference to the general principles to be followed when developing CCAMLR-sponsored research, and specific advice from WG-SAM's 2011 focus topic on the requirements for research plans (SC-CAMLR-XXX, paragraphs 9.3 to 9.6).

11.18 The Commission endorsed the Scientific Committee's advice on the three-year research fishing by Russia on *Dissostichus* spp. in Subarea 88.3 SSRUs B and C (SC-CAMLR-XXX, paragraphs 9.7 to 9.13 and 9.37), including the:

- (i) limits on research fishing (50 longline sets and 65 tonnes of *Dissostichus* spp. in 2011/12)
- (ii) increase in the tagging rate to 10 fish per tonne of green weight caught
- (iii) provision of additional data on the spatial distribution of tagged fish released in 2010/11 and on the suitability of fish for tagging and number of hooking injuries for captured fish
- (iv) invitation for scientists from other Members to collaborate in the modelling of stock status.

11.19 The Commission endorsed the Scientific Committee's advice on the two-year research fishing by Russia on *Dissostichus* spp. in SSRU 882A (SC-CAMLR-XXX, paragraphs 9.14 to 9.16, see also CCAMLR-XXIX, paragraphs 4.68 and 4.69), including:

- (i) limits on research fishing (10 tonnes of *Dissostichus* spp. in 2011/12)
- (ii) submission of results to WG-FSA in 2012.

11.20 The Commission endorsed the Scientific Committee's advice on research fishing by Japan on *Dissostichus* spp. in Divisions 58.4.4a and 58.4.4b (Ob and Lena Banks) (SC-CAMLR-XXX, paragraphs 9.17 to 9.26 and 9.37), including:

- (i) limits on research fishing (71 longline sets and 70 tonnes of *Dissostichus* spp. in 2011/12)
- (ii) requirement to tag fish with a high probability of survival
- (iii) requirement to evaluate and report the effects of fishing gear on the suitability of fish for tagging and the number of hooking injuries for captured fish across all size classes and modify the research design and/or choice of fishing gear configuration accordingly to ensure that the requirements of an effective tagging program are met. Where particular gear types are incapable of capturing sufficient fish suitable for tagging, alternate sampling tools should be used.

11.21 The Commission endorsed the Scientific Committee's advice on the research fishing by Japan on *Dissostichus* spp. in Division 58.4.3b (BANZARE Bank) (SC-CAMLR-XXX, paragraphs 9.27 to 9.36), including the:

- (i) limits on research fishing (48 longline sets and 40 tonnes of *Dissostichus* spp. in 2011/12)
- (ii) requirement to tag fish with a high probability of survival
- (iii) requirement to evaluate and report the effects of fishing gear on the suitability of fish for tagging and the number of hooking injuries for captured fish across all size classes and modify the research design and/or choice of fishing gear configuration accordingly to ensure that the requirements of an effective tagging program are met. Where particular gear types are incapable of capturing sufficient fish suitable for tagging, alternate sampling tools should be used
- (iv) analysis of the distribution of tags, the effect of different gear types on trauma and condition and tagging rates across the survey area to be reported to WG-FSA in 2012.

11.22 The Commission noted the work program of the Scientific Committee in the coming intersessional period (SC-CAMLR-XXX, paragraph 9.36) and looked forward to recommendations on these research programs next year.

Research fishing in fisheries with assessments

11.23 The Commission endorsed the Scientific Committee's advice on the multi-year research fishing proposal by New Zealand to monitor the abundance of pre-recruit *D. mawsoni* in the southern Ross Sea (paragraphs 11.14 and 11.15; SC-CAMLR-XXX, paragraphs 9.40 and 9.41).

11.24 The Commission noted the other notifications of scientific research activities in 2011/12 (SC-CAMLR-XXX, paragraph 9.43).