ADVICE TO SCIC AND SCAF

12.1 The Chair presented the Scientific Committee's advice to SCIC and SCAF during the meeting. The advice to SCAF is summarised in section 11. The advice to SCIC is summarised below; the primary advice is provided elsewhere in this report.

Advice to SCIC

Mitigation measures to avoid incidental mortality of birds and mammals

- 12.2 The Scientific Committee noted that WG-IMAF (Annex 6, paragraph 2.49) had explicitly identified those vessels that did not achieve full implementation of the requirements of Conservation Measures 26-01, 25-02 and 25-03 and recommended that this information be passed to SCIC in order to facilitate an assessment of compliance. The vessels and aspects of the conservation measures involved were:
 - (i) Antarctic Bay, Argos Froyanes, Shinsei Maru No. 3, Austral Leader II and Koryo Maru 11 which had plastic packing bands to secure bait boxes on board during cruises in the Convention Area (Annex 6, paragraph 2.30);
 - (ii) gear debris from the *Viking Bay* and the *Koryo Maru 11* and the discharge of garbage from the *Viking Bay* (Annex 6, paragraph 2.31);
 - (iii) Koryo Maru 11 and the Hong Jin No. 707 which exceeded the maximum spacing between weights on longlines (Annex 6, paragraph 2.32);
 - (iv) Viking Bay due to the discharge of hooks in offal (Annex 6, paragraph 2.38);
 - (v) *Insung No. 1* and *Antartic III* which used streamers that did not meet the minimum length specified (Annex 6, paragraph 2.41);
 - (vi) *Punta Ballena* which did not use haul-scaring devices on all hauls (Annex 6, paragraph 2.44);
 - (vii) *Maksim Starostin*, which used a net monitor cable during one krill trawl (Annex 6, paragraph 2.46);
 - (viii) *Dalmor II* which discharged offal during net hauling while trawling for krill (Annex 6, paragraph 2.47).

Scientific tagging program

12.3 The Scientific Committee noted the discussion of the implementation of the tagging program contained in the report of WG-FSA (Annex 5, paragraphs 3.46 to 3.63 and 5.81) and agreed that while the requirement to enter recapture details in logbooks, to provide

photographs and return the tags to the Secretariat involved some redundancy, it allowed for improved validation. However, it recognised that digital images could be manipulated, therefore photographic evidence may not alone be evidence of a tag-return.

- 12.4 The Scientific Committee agreed that the Secretariat should check for correct transcription of returned tags, including all alphanumeric characters, further noting that a requirement to return all recovered tags was not currently part of Conservation Measure 41-01. The Scientific Committee was optimistic that the Secretariat-based centralisation of the tagging program in new and exploratory fisheries would go some way to addressing these issues into the future.
- 12.5 The Scientific Committee noted that there are two types of recording errors that could lead to a discrepancy in the rates of tagging and recapture reported by vessels and observers. These errors could be characterised as 'accidents and non-compliance' and it noted that it would be useful to separate detection and remediation methodologies for each type of error.
- 12.6 The Scientific Committee recognised that there is a clear incentive for a vessel to report the rate of tagging in order to comply with conservation measures. However, there is currently no such formal assessment of recapture rates, and it may be possible to manipulate recapture rates (and hence to influence the outcomes of assessment models) by reporting recaptures with incomplete data so as to make matching to a release record difficult or impossible.
- 12.7 The Scientific Committee noted the situation of a vessel that did not achieve the required tagging rate of three fish per tonne in Divisions 58.4.1 and then proceeded to fish in Divisions 58.4.3a and 58.4.3b and tag above the required rate. The Scientific Committee noted that the increased tagging outside Division 58.4.1 did not meet the objectives of the tagging program, and was concerned that such a situation may indicate that sufficient tags were not released throughout the fishing operation. The Scientific Committee noted that this issue was more appropriately considered by SCIC.
- 12.8 An investigation of tagging rate per vessel was plotted against time to check whether tagging was carried out at the same rate as fishing in accordance with Conservation Measure 42-01 (Annex 5, Figure 4). The results were very variable, with some vessels tagging at the correct rate throughout fishing, whilst other vessels initially released very few tags and the tagging rates sharply increased in the middle or at the end of the fishing period. The Scientific Committee was concerned that relatively high tagging rates over very short periods of time could be detrimental to the condition of the fish on release, and was not consistent with the required distribution of tagged fish throughout the area. The Scientific Committee recommended this issue be referred to SCIC and noted particular attention might need to be drawn to Conservation Measure 42-01 and changes made last year to address this issue.

Discrepancy between fine-scale catch reporting and CDS records

12.9 The Scientific Committee noted that last year WG-FSA (SC-CAMLR-XXVI, Annex 5, paragraph 4.29) questioned the occurrence of *D. eleginoides* in catches reported by the then Uruguayan-flagged vessel *Paloma V* which fished in Divisions 58.4.1 and 58.4.3b in

2006/07. The *Paloma V* had reported the majority of its catch from those divisions as being *D. eleginoides* (80% of the catch in Division 58.4.1; 92% in Division 58.4.3b), while the landings reported in the CDS indicated that the catch consisted mostly of *D. mawsoni*. In 2008 the Secretariat contacted the Uruguayan authorities to seek clarification and advice on the fine-scale data submitted by the *Paloma V* when the vessel fished in Divisions 58.4.1 and 58.4.3b in 2006/07, and to confirm the identity of toothfish species reported in the data. Uruguay confirmed that the catches of *D. eleginoides* reported in the fishery and observer data were correct, and that a discrepancy had occurred in the CDS data; this discrepancy was addressed (Annex 5, paragraph 3.5). The Scientific Committee considered that it may be appropriate that SCIC consider this issue further.

Bottom fishing notifications in accordance with Conservation Measure 22-06

- 12.10 The Scientific Committee considered the preliminary assessments and proposed mitigation measures provided by Members (CCAMLR-XXVII/26) to avoid and mitigate significant adverse impacts on VMEs and noted that only five out of 12 proposals contained such preliminary assessments. Furthermore, there was a large variation in substance of the preliminary assessments (paragraphs 4.223 to 4.225).
- 12.11 The Scientific Committee agreed that a common approach is needed for providing these assessments, similar to the requirements for notifying exploratory fisheries. It agreed that some consistency is needed in the provision of information, based on the requirements set out in paragraphs 7(i) and (ii) in Conservation Measure 22-06, and recommended a pro forma as described in Annex 5, Table 20, be used in future.

IUU gillnet fisheries

12.12 The Scientific Committee noted that the number of IUU fishing vessels observed in 2007/08 declined (Annex 5, paragraph 3.14). However, as the IUU fleet is increasingly dominated by gillnet vessels, there is currently no information to estimate the catch of these vessels, or the impact of gillnets on target and by-catch species, seabirds and marine mammals (Annex 6, paragraphs 5.8 to 5.10).

Data quality checking procedure

12.13 The Scientific Committee noted the methodology for assessing data quality that had been considered by WG-SAM and WG-FSA (WG-SAM-08/13) and noted that this could be used by SCIC with respect to the identification of vessels which did not comply with the CCAMLR data-reporting requirements. The Scientific Committee endorsed the recommendation of WG-FSA that the authors of WG-SAM-08/13 continue to develop a series of data-quality metrics in conjunction with the Secretariat during the intersessional period, and report progress to WG-SAM.