NOTIFICATIONS TO CONDUCT RESEARCH SURVEYS USING COMMERCIAL VESSELS

8.1 The Scientific Committee discussed one notification of intent to conduct toothfish longline research in 2010 using commercial vessels under the provisions of Conservation Measure 24-01.

8.2 Japan proposed to continue research on the distribution and population structure of toothfish in Divisions 58.4.4a and 58.4.4b started in 2007/08 (Annex 5, paragraphs 5.97 to 5.111 and 13.7; see also SC-CAMLR-XXVII, Annex 5, paragraphs 5.116 and 5.117; and CCAMLR-XXVII/BG/15).

8.3 The Scientific Committee agreed that in evaluating research programs in data-poor fisheries, there were three questions that need to be addressed for the provision of advice on what research would be appropriate (Annex 5, paragraph 5.114), taking account of the issues in paragraphs 4.163 to 4.168:

- (i) What research needs to be undertaken to facilitate a preliminary assessment of stock status?
- (ii) What is the mortality of fish that will likely occur as a result of undertaking the research without any additional catch? For example, if all fish in good condition were tagged and released, what proportion of the tagged fish would be in poor condition and die?
- (iii) What is the quantity of fish that could be taken to offset the cost of the research, noting the possible status of the stock?
- 8.4 Dr Ichii made the following statement:

'The research proposal has been considered by WG-SAM and WG-FSA and agreement had been reached on the survey design, with the exception of the sample size. To obtain an agreeable sample size, Japan has made a recalculation by applying an Australian scenario that the current stock level is at 40% of SSB₀ (initial spawning stock biomass) and hence the precautionary sustainable harvest rate should be 1.6%. Under this scenario SSB₀ is estimated as about 6 000 tonnes. Multiplication of this SSB₀ with a harvest rate of 1.6% results in a precautionary sustainable sample size of 95 tonnes. It should be noted that during the meeting of WG-FSA, Japan had inadvertently multiplied the harvest rate by the SSB and this had resulted in an incorrect estimate of sample size (81 tonnes).

This sample size is necessary to obtain reliable stock estimate parameters and complete coverage of the survey area as follows:

- (i) it would be possible to utilise the previous tagging experiment conducted in 2008. The number of recaptured fish tagged in the previous experiment would provide useful information for population estimates;
- (ii) in future annual tagging experiments, the number of recaptured tagged fish would provide useful information for reliable population estimates;

(iii) the possibility for complete coverage of whole grid survey points would be as high as 80%.

Japan expressed a strong commitment to continue this scientific research for 3–5 years. The research plan proposal for 2010 will be repeated in each of at least two subsequent years to release and recapture tags with the intention of developing a stock assessment.'

8.5 Dr Welsford recalled that over 6 000 tonnes of toothfish are estimated to have been removed by IUU fishing from this stock between 1996/97 and 2007/08. Hence, if Japan's revised estimate of SSB_0 of around 6 000 tonnes is assumed to be correct, the stock would evidently have been rapidly depleted by IUU fishing, and is highly unlikely to have recovered to a level that could sustain research fishing at the level proposed by Japan.

8.6 The Scientific Committee recommended that progress of any experiment be reviewed by WG-FSA annually and modified as appropriate, based on that advice.

8.7 The Scientific Committee noted that in its discussions, WG-FSA (Annex 5, paragraphs 5.97 to 5.111) was unable to reach consensus on an appropriate level of catch for the survey.

8.8 The Scientific Committee noted that further development of this research proposal, in line with previous comments, has been undertaken. The main point is what level of catch is appropriate to help offset the cost of the research in order not to impact on the recovery of the stock. As a result, the proposal needs to be considered by the Commission in light of the agreed approach in SC-CAMLR-XXVII, paragraphs 8.10 and 8.11.

8.9 The Convener of WG-SAM (Dr Constable) offered to include a review of this research program and how it might improve the advice to the Commission on the status of stocks in this area and to facilitate intersessional work in this regard.

Notifications to conduct scientific surveys using research vessels

8.10 The Scientific Committee noted that the following Members would be conducting scientific research activities in 2010 and in accordance with Conservation Measure 24-01:

Australia: Research on the vulnerability of habitats in high latitudes to impacts by bottom fishing gear (December 2009 to January 2010, Divisions 58.4.1 and 58.4.2);

Possible survey for *C. gunnari* in Division 58.5.2 in early 2010;

Demersal fish survey in Division 58.5.2 in May–June 2010;

UK: Demersal fish survey in Subarea 48.3 in January–February 2010;

Deeper-water demersal fish survey on the slope in Subarea 48.3 in February 2010.