

SCIENTIFIC RESEARCH EXEMPTION

9.1 Scientific surveys using research vessels notified to the Secretariat at the time of the meeting of the Scientific Committee were:

- (i) bottom trawl survey in Subarea 48.3 by the UK in 2008
- (ii) bottom trawl survey in Division 58.5.2 by Australia in 2008
- (iii) CCAMLR-related IPY surveys by Germany, Japan, New Zealand, Norway and the UK and related CAML activities.

9.2 The Scientific Committee commended all these countries for their commitment to the IPY and CAML, and recognised the importance of these surveys for the future work of CCAMLR.

9.3 In addition, the Scientific Committee discussed the two notifications of intent to conduct toothfish longline research using commercial vessels under the provisions of Conservation Measure 24-01. It is expected that the purpose of allowing research fishing under the terms of Conservation Measure 24-01 using commercial longliners would be to collect data which will eventually allow an assessment of fish stocks in the sampled area to be completed. However, there is a need to restrict initial effort, such as provided in Conservation Measure 41-09 (paragraph 12), to prevent over-harvesting before sufficient data are obtained to conduct an assessment.

9.4 Japan submitted a notification to conduct scientific research on the distribution and population structure of toothfish in Divisions 58.4.4a and 58.4.4b in 2007/08 (COMM CIRC 07/109 and SC-CAMLR-XXVI/9). The main objective outlined in the notification is to collect various biological and physical oceanographic data on toothfish required for assessing the status of the stocks. This information was considered important because it has been five years since the area has been open to fishing. In addition, tagging activities would be conducted to contribute to future investigations on the distribution and population structure of toothfish in these areas.

9.5 The Scientific Committee noted the concerns of WG-FSA (Annex 5, paragraph 5.32) that commercial harvesting of toothfish in Division 58.4.4 was prohibited in 2002 because of rapidly declining fish stocks attributed to intense IUU fishing activities, and that it was unlikely that toothfish stocks in Division 58.4.4 would have substantially recovered since 2002. For this reason many Members expressed concern over the size of the proposed catch from this area, noting that much of the information proposed to be collected can be obtained from relatively small catches. For example, information on stock structure (genetic samples) could be obtained from relatively few fish, or biological data, such as fish size, may be obtained from relatively few fishing lines.

9.6 At present, the amount of toothfish catch specified in Conservation Measure 24-01, Annex A, to support tagging studies is set at 10 tonnes, although larger catches may be needed to estimate CPUE, if there is large variability in catch rates. Catches required for such assessments may be greater than is sustainable. The Scientific Committee supported the view of WG-FSA that catch levels of no more than 10–20 tonnes in each SSRU were appropriate in the absence of further justification to show how the data will be used in an assessment and

that the recovery of fish stocks will not be impeded (Annex 5, paragraph 5.34). Based on the likely variability in catch rates, 20 tonnes was considered to be the minimum catch required for robust CPUE estimation.

9.7 The Scientific Committee recommended an overall limit of 80 tonnes from Division 58.4.4 and that the maximum catch from any SSRU should be 20 tonnes. The research sets should involve a random element to increase the value of the survey information and detailed biological data should be collected from the target and all by-catch species (individual fish length, weight, sex, reproductive stage, otoliths for ageing studies and tissue samples for genetic studies) in addition to representative length frequencies from each haul. Additional information should be reported on the trotline fishing system and the design of the survey, and the depth of fishing recorded at each set. The Scientific Committee also agreed that tagging should be at a minimum rate of three fish per tonne. On this basis, the survey should increase knowledge of the current stock status in this area.

9.8 Australia submitted a notification to conduct scientific research in 2007/08 (COMM CIRC 07/117). The notification is to conduct research on the status of toothfish and major by-catch species in Division 58.4.3b. The survey vessel will use longlines and will take approximately 50 tonnes of finfish, but it is likely that the survey may catch in excess of 50 tonnes of finfish and more than 10 tonnes of toothfish. The specific research objectives for the survey are to: (i) quantify the relative abundance of toothfish and major by-catch species available to the longline method across BANZARE Bank; (ii) determine the demographic characteristics of the target and major by-catch species across BANZARE Bank (i.e. size distribution, sex ratios and reproductive status); and (iii) collect biological material which can be used to determine the relationships between toothfish stocks in the southwestern Indian Ocean sector.

9.9 The Scientific Committee noted that under Conservation Measure 24-01 (paragraph 1), catches taken in this area (where catch levels exist) will be considered as part of the catch limit for the season. Although fishery data exist in Division 58.4.3b, they are very patchy. Therefore, the present proposal is to conduct a standardised random survey across the entire area. This will be the first such effort and standardised CPUE data will greatly enhance the ability of WG-FSA to determine biomass of toothfish in this division and to better understand the relative importance of the existing fishing grounds to the stock in this division.

9.10 The Scientific Committee supported the research and data collection plan proposed for this survey and in particular the random stratified design of the survey intended to cover the entire BANZARE Bank (paragraph 4.147).

General comments relative to Conservation Measure 24-01

9.11 The Scientific Committee identified the dilemma that without surveys the status of stocks would remain unknown, while providing for the catch required to complete a survey may further deplete the stocks under investigation. It considered that this conservation measure should be reviewed to ensure it was consistent with its intended purpose. If surveys are to be approved under this measure, they must provide a reasonable certainty that the state of knowledge will be advanced. For this purpose, the Scientific Committee supported the WG-FSA suggestion that all notifications which proposed taking toothfish should be required

to include research proposals for review by WG-FSA and it would be highly desirable for Members submitting research proposals using commercial vessels to ensure appropriate scientists attend the working group meetings.