MANAGEMENT UNDER UNCERTAINTY

IUU Fishing

7.1 The Scientific Committee considered SC-CAMLR-XIX/BG/13 which reported progress made at the FAO Expert Consultation on Illegal, Unreported and Unregulated (IUU) Fishing, held in Sydney, Australia, during May 2000, toward an International Program of Action (IPOA) to deal with IUU. It was noted that the draft IPOA was used as the basis for discussion and negotiation at a Technical Consultation on IUU held in Rome, Italy, from 2 to 6 October 2000, but that final agreement on the IPOA was not reached. Final agreement is expected before the end of the year, however, and the Scientific Committee noted that the adoption of a global plan to combat IUU would aid the work of CCAMLR.

Regulatory Framework

7.2 The Scientific Committee considered SC-CAMLR-XIX/BG/27, a working paper on scientific issues related to a unified regulatory framework for CCAMLR. This had been prepared during the intersessional period 1999/2000 by the ad hoc Task Group on the Development of a Unified Regulatory Framework for CCAMLR. The Scientific Committee noted the discussion of an earlier draft of this document in WG-FSA's report (Annex 5, paragraphs 4.270 to 4.274).

7.3 The Scientific Committee recalled discussion at recent meetings regarding the need for a unified framework for providing management advice on all fisheries in the Convention Area (CCAMLR-XVII, paragraphs 10.3 to 10.7). In 1999 the Chairman of the Scientific Committee convened the ad hoc task group to explore the scientific basis for a regulatory framework. The first report of this task group was discussed at the 1999 meeting of the Scientific Committee (SC-CAMLR-XVIII, paragraphs 7.11 to 7.23).

7.4 The ad hoc task group described the purpose of the regulatory framework from a scientific perspective under three headings:

(i) to provide clear guidance on the data and information requirements from all fisheries in the Convention Area to support the development of management advice by the Scientific Committee in accordance with the precautionary and the ecosystem approaches to fisheries management;

(ii) to support the design of control mechanisms that will enable the collection of data and information for scientific analysis, and aim to ensure that fisheries in the Convention Area do not expand faster than the acquisition of information necessary for the development of management advice; and

(iii) to streamline the process of annual review and assessment of fisheries by the Scientific Committee and its working groups, in the face of a mounting workload created by the increasing number of fisheries in the Convention Area.

7.5 The aim of the task group was to develop a procedural mechanism to achieve the purpose described in paragraph 7.4. The report recalled previous attempts to do this through the definition of standard fishery types within a general scheme of stages of fishery development, starting with new fisheries and moving through exploratory or developing fisheries to established fisheries and lapsed and/or closed fisheries. The Scientific Committee noted the major difficulties involved in defining stages of fishery development. These have been revealed firstly in preparation of the new and exploratory conservation measures and more recently in the elaboration of the regulatory framework.

7.6 The task group therefore focused on the establishment of a framework encompassing all fisheries, which does not rely on defining the stages of fishery development. The task group

proposed a simplified framework within which existing regulatory requirements, including notification, establishment of research and fishery operations plans and data collection plans could be generalised and applied to all fisheries, not just those falling under the remit of the new and exploratory measures (Conservation Measures 31/X and 65/XII). The proposal also addressed the specification of conditions that would apply to closed fisheries that are reopened, and to the interpretation and application of the existing new and exploratory measures.

7.7 A key component of the generalised mechanism proposed by the task group is a new reference document prepared and maintained by the Secretariat for each fishery in the Convention Area, known as the *Fishery Plan*. The *Fishery Plan* would provide a comprehensive summary of information on each fishery, including a list of all the regulatory requirements (i.e. harvest controls, notification requirements, a research and fishery operations plan, and a data collection plan). It would also provide a summary of the fishing activity (e.g. catch limits by year, catches by year, level of effort, number of vessels and vessel days, fishery data available for assessment, notifications received), and a summary list of the data received by the Secretariat for the most recent season in which fishing took place. Having all of this information brought together in one place would help the Scientific Committee and its working groups plan future work, depending on what data are submitted from the fishery and/or what notifications are received. For closed fisheries, the *Fishery Plan* could be used to specify next to each of these elements the conditions under which a reopened fishery would be expected to operate.

7.8 A draft of the structure of the *Fishery Plan* is provided in Table 6. It is expected that among other things the plan will provide a useful successor to the assessment summaries previously provided in the report of WG-FSA. The Scientific Committee agreed that the draft structure should be evaluated by WG-EMM and WG-FSA at their next meetings.

7.9 To provide comprehensive coverage of all CCAMLR fisheries under the framework, a *Fishery Plan* would need to be prepared and maintained for all fisheries which exist, or have existed in the Convention Area (i.e. all those which have been regulated under CCAMLR conservation measures at some time)[1]. This would create a simplified structure of two fishery types: those with fishery plans and those without. For the former, the regulatory and scientific requirements would be specified in the plan. For the latter, the Commission would need to establish entry-level conditions, which it has already done in the context of new and exploratory fisheries.

7.10 The Scientific Committee noted that this would negate the requirement for definitions of fishery types or stages that have become complex and ambiguous and would achieve the two original design criteria of the Regulatory Framework (CCAMLR-XVII/18):

(i) to be sufficiently comprehensive to provide guidelines for the management of all existing and potential fisheries; and

(ii) to be sufficiently flexible to allow the Commission to adopt measures tailored to the specific needs of individual fisheries, on a case-by-case basis.

7.11 Figure 2 illustrates the envisaged function of the *Fishery Plan* in the assessment of fisheries by the Scientific Committee and the regulation of fisheries by the Commission. Information flows from the Scientific Committee to the Commission in the form of management advice, based on analyses of information available at the time of the annual meeting. The Commission uses this information, and the results of its own deliberations, to develop conservation measures and other regulatory requirements. This information will be used to modify the *Fishery Plan* for each fishery taking place during the current season, and each fishery expected to take place during the forthcoming season (starting on 1 December).

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1 Only those *Fishery Plans* covering fisheries which have either been active during the current season or are under notification to become active during the forthcoming season, would need to be modified each year.

7.12 The Scientific Committee noted that the *Fishery Plan* was not intended to be a regulatory instrument of the Commission and would not itself govern harvesting activity within the Convention Area. It would, however, contain information from the conservation measures and other sources, providing a single point of reference for each fishery to support the application of management measures and track developments and changes in individual fisheries over time. The content of the *Fishery Plan* would provide the Scientific Committee with guidance on the current and expected future operation of the fishery and also the operational objectives and decision rules the Scientific Committee should apply in its analysis of fisheries data and information provided by Members.

7.13 Specifically, the Scientific Committee noted that it would enable:

(i) the Scientific Committee to make decisions about whether a new assessment is required and/or possible; and

(ii) the Commission to formulate conservation measures based on all appropriate information about the fishery.

7.14 The Scientific Committee noted that the *Fishery Plan* could also be used by the Commission to develop a standardised structure for the conservation measures.

7.15 The task group's proposal for generalising the existing requirements for new and exploratory fisheries is outlined Table 7. The current requirements for notification, research and fishery operations plans, data collection plans and other management requirements as specified in Conservation Measures 31/X and 65/XII, are summarised in Tables 8 and 9.

7.16 The Scientific Committee noted the comments of the task group regarding the utility of a generalised notification procedure for streamlining the annual review of fisheries by the Scientific Committee and its working groups and aiding in the planning of the increasing workload of scientific analysis (see SC-CAMLR-XVIII, paragraph 7.16). It would, for example, help the working groups to make decisions about whether or not to do assessments for particular fisheries in particular years. Under a generalised notification procedure, those fisheries for which notifications of proposed fishing activity in the forthcoming season are received by the required deadline would be given priority for assessment analyses on the basis of available data.

7.17 The Scientific Committee noted that this would not mean that fisheries without a notification, and thereby having no new management advice, would automatically be closed. There may be scientific advice for those fisheries (which could be considered to be 'lapsed') from previous years that would still be relevant. This advice would need to be suitably modified, in a precautionary sense (for example, the recommended catch level might be reduced), to account for the length of time since it was drafted, and its currency or relevance to the present situation. The duration of the relevance of management advice would ideally be specified by the working group at the time of the assessment. This might also be the case if a notification had been received, but it was not possible to update an assessment because no new data were available, particularly if the original management advice was based on a scientific survey and the relevance of the results of that survey decreased over time (for example, due to uncertainty over recruitment and/or mortality).

7.18 The Scientific Committee agreed that changes proposed by the task group will create a more proactive process for the Scientific Committee and Commission, in which each body specifies the requirements that will trigger future actions. For instance, the task group proposed that if a fishery fails to meet all the scientific requirements (essentially data collection from a variety of possible sources) and/or no notification of future interest in the fishery is received by CCAMLR, then the Scientific Committee (and its working groups) would not be expected to attempt to undertake a new assessment. This will allow the Scientific Committee to adjust its work to the needs of fisheries as those needs arise and according to whether the regulatory requirements have been met. General default requirements can be specified for fisheries that do not yet exist or are not known about. But in all cases there will be an expectation to notify each year and to collect and submit data depending on the requirements prescribed by the Scientific Committee.

7.19 The Scientific Committee expressed its appreciation to Drs Parkes, Agnew and Constable for the preparation of SC-CAMLR-XIX/BG/27. Considerable discussion ensued regarding the implementation of the proposed uniform regulatory framework, the submission of notifications to fish, the development of fishery plans, and the corresponding responsibilities of Members and the Secretariat. It was noted that no new requirements are being suggested and that the proposed *Fishery Plans* would provide a framework to formalise existing documentation, including research exemptions. It was also noted that notification requirements may need to be refined, that default positions in the absence of new information need to be defined, and that changes to existing definitions of fishery management units need to be accommodated.

7.20 The Scientific Committee endorsed the concept of the *Fishery Plan* and requested that example plans be developed as a means of refining the procedure and generating future discussion. Accordingly, the Scientific Committee requested that the Secretariat be tasked with preparing fishery plans for krill and for *C. gunnari* in time for the 2001 meetings of WG-EMM and WG-FSA respectively.

Trigger Levels in the Management of the Krill Fishery

7.21 At its last meeting, the Scientific Committee recognised that the setting of a new precautionary catch limit is the beginning of the process for further developing a management procedure for krill in the South Atlantic. It recognised that the procedure will need to include consideration of the subdivision of the catch limit into smaller management units. It further stated that the size of these management units and the trigger level at which the catch limit would be subdivided needed to be determined by WG-EMM at its 2000 meeting (SC-CAMLR-XVIII, paragraph 5.14; Annex 4, paragraphs 6.1 to 6.4 and 6.11).

7.22 The Scientific Committee endorsed the recommended subdivision of the yield for krill in Area 48 to provide catch limits in each of the Subareas 48.1, 48.2, 48.3 and 48.4 (paragraph 5.9) based on the results of the CCAMLR-2000 Survey. The Scientific Committee agreed that smaller spatial scales within each statistical subarea should be considered in relation to addressing management requirements and achieving conservation objectives for krill predators at various spatial scales (paragraph 5.14). It recognised that even the catch limits in each subarea could cause localised depletion if all the catch was taken from within a confined area, especially in relation to the foraging needs of land-based marine predators.

7.23 The Scientific Committee also noted that another five to 10 years will be required to develop a management procedure consistent with Article II of the Convention (paragraph 5.15) that takes full account of spatial, particularly small-scale, requirements of land-based predators. It agreed that in the absence of advice on these requirements, the Scientific Committee is unable to judge how the dynamics of local populations may be affected by the proposed krill catch limits within subareas. To that end, the Scientific Committee recommended to the Commission that krill catches do not exceed a set (i.e. 'trigger') level in Area 48 until a procedure for division of the overall catch limit into smaller management units has been established. This is consistent with the current Conservation Measure 32/X which sets such a trigger level at 620 000 tonnes which is slightly above the historical maximum annual catch in Area 48 to date.

Advice to the Commission

7.24 The Scientific Committee advised that an alternative to the current trigger level contained in Conservation Measure 32/X could be 1 million tonnes which is approximately the harvest level suggested for each of the subareas in Area 48, from the division based on the CCAMLR-2000 Survey results.