

**MINUTES OF THE
ADVISORY COMMITTEE ON THE MARINE ENVIRONMENT**

**ICES Headquarters
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International Council for the Exploration of the Sea

Conseil International pour l'Exploration de la Mer

TABLE OF CONTENTS

Section	Page
1 OPENING OF THE MEETING	1
2 ADOPTION OF THE AGENDA AND TIMETABLE	1
3 ORGANIZATIONAL AND PROCEDURAL ISSUES	1
4 OSPAR: REVIEW OF QSR 2000	1
4.1 Criteria and Procedures; Form of Review and Product	1
4.2 General Comments	2
4.3 Review of Work in Sub-groups	3
4.3.1 Chapter 2	4
4.3.2 Chapter 3	4
4.3.3 Chapter 4	4
4.3.4 Chapter 5	4
4.3.5 Chapter 6	5
5 EC DG XIV: CONSIDERATION OF THE REPORT “THE EFFECTS OF DIFFERENT TYPES OF FISHERIES ON THE NORTH SEA AND IRISH SEA BENTHIC ECOSYSTEMS” (LINDEBOOM AND DE GROOT, EDS.).....	5
6 NORDIC COUNCIL OF MINISTERS: “STATUS OF FISHERIES AND RELATED ENVIRONMENT OF NORTHERN SEAS”	7
7 CONSIDERATION OF REQUEST FOR CO-SPONSORSHIP OF OSPAR WORKSHOPS ON HABITAT ISSUES	9
8 REVIEW AND ADOPTION OF THE MINUTES	9
9 ANY OTHER BUSINESS	9
10 CLOSING OF THE MEETING	9
ANNEX 1: LIST OF PARTICIPANTS	10
ANNEX 2: TERMS OF REFERENCE	14
ANNEX 3: AGENDA.....	16
ANNEX 4: RAPPORTEUR ASSIGNMENTS FOR THE QSR 2000 PEER REVIEW.....	19
ANNEX 5: SUB-GROUP ASSIGNMENTS FOR THE OSPAR 2000 QSR PEER REVIEW	22
ANNEX 6: LIST OF MEETING DOCUMENTS	23

1 OPENING OF THE MEETING

The Chair, Dr H.R. Skjoldal, opened the meeting at 9.30 hrs and welcomed the participants.

The participants then introduced themselves. A complete list of meeting participants is attached as Annex 1.

The General Secretary, David Griffith, welcomed the members of ACME, noting that this was the first meeting that combined both fisheries and environmental experts. He wished the Committee well in their deliberations.

2 ADOPTION OF THE AGENDA AND TIMETABLE

The Chair reviewed the issues on the agenda and the general products that will be required. The terms of reference for the meeting are attached as Annex 2.

In association with the review of the OSPAR QSR, he noted the structure of the OSPAR QSR 2000, comprising chapters on oceanography, chemical parameters, biological parameters, and impact of human activities. A number of years ago, ICES developed a general structure for QSRs, but he felt that ACME should reconsider this structure as well as the role of ICES in the preparation of QSRs and other types of assessments. He felt that the discussion of the OSPAR QSR would present a good opportunity for ACME to begin consideration of these issues, with more detailed discussion at the June ACME meeting.

Another issue the Chair considered important for further consideration is that of fisheries/environmental questions in the light of fisheries precautionary limits.

Thirdly, he felt that the issue of ecotoxicological assessment criteria (EACs), their derivation, and their meaning in relation to actual environmental concentrations should be considered from an ICES standpoint.

These issues should be handled in further detail at the June ACME meeting.

The approved Agenda and the timetable for the meeting are attached as Annex 3.

3 ORGANIZATIONAL AND PROCEDURAL ISSUES

The Chair stated that there is a moratorium on information on the OSPAR QSR, so members should be discrete and not discuss these reports outside the meeting. The list of rapporteur assignments for the QSR 2000 peer review is attached as Annex 4.

For the EC DG XIV request, the ACFM rule of a 48-hour moratorium on providing any information to the outside, with the exception of to their institute directors, will be enforced by ACME. Further details of this moratorium will be discussed later in the meeting.

It was agreed that the minutes would mainly cover issues that ACME considered were important to record so that it was clear why choices or formulations were made, or on issues of controversy where the ACME could not come to a consensus on a formulation. It was agreed that the ICES Environment Adviser would prepare the minutes during the meeting and provide copies for review and comment at various stages during the meeting, with approval of minutes on the QSR 2000 taking place on Saturday and consideration of the remainder of the minutes on the last day of the meeting.

4 OSPAR: REVIEW OF QSR 2000

4.1 Criteria and Procedures; Form of Review and Product

The Chair provided a background on the OSPAR working structure regarding environmental assessments and monitoring, and specifically on the procedures used in the preparation of the five regional QSRs and the QSR 2000. Unfortunately, Chapter 6 of the QSR 2000 had only been sent to ICES late on Friday, 21 January, so few of the members would have had the possibility of reviewing it.

In the overall comments, it was stated that much of the material was quite general, but there did not appear to be many factual errors. There were however many things that were missing, some of which were contained in the regional QSRs, and some of which were not in the regional QSRs. Thus, it was felt that ACME should concentrate on errors and omissions. In this context, it was felt that the report prepared for the Nordic Council of Ministers contained much better formulations of the material and should be used, where possible.

The question was raised concerning the intended readership of this report, as it presently is at various levels of complexity. Also, should the readers be expected to go back to the regional QSRs to find the details, or should the QSR 2000 be clear on its own, without further reference to the other reports? In some cases, the regional reports contain a great deal of data and material that have not been included in the QSR 2000, but in other cases there is very little material in the regional QSRs to support statements in the QSR 2000.

There was some discussion of the issue of priorities of impacts and effects covered in Chapter 6. It was felt that some relative prioritization should be made among the various issues, or at least some guidance should be given to OSPAR for such prioritization.

In sum, it was agreed that the chapters of the QSR 2000 are of a general nature and that the material is generally correct. However, the texts should be checked for errors, statements that are not substantiated by the regional reports should be identified, and critical information that is missing should be identified.

The question was raised as to whether readers of the QSR 2000 should be required to go back to the regional QSRs or whether citations should be included in the QSR 2000 for specific statements (not for general, textbook statements). The ACME agreed that more references should be included for the specific statements, to cater for scientific readers of the document. It was noted that item (f) of the OSPAR guidelines for the ICES scientific peer review requested ICES to check if all statements that should be referenced are adequately cited.

4.2 General Comments

Comments on Chapter 1

In three paragraphs of Chapter 1, there is a promise that there will be a prioritization of the issues. However, from the rest of the document it is obvious that this prioritization has not been done.

Comments on Chapter 2

This chapter needs quite a bit of work.

Comments on Chapter 3

This chapter is quite uneven, the terminology used is not always clear or correct, and information is missing on several topics. There is a lot of work that needs to be done on this chapter. The purpose of this chapter is not completely clear; it is long and contains very many details, and it is not clear as to the purpose of presenting so many details.

Comments on Chapter 4

This does not provide a comprehensive picture; there are a number of examples provided, but it was not clear as to whether there was more information available. The material on metals contains tables and diagrams, but these are lacking for the organic contaminants. The material does not draw conclusions from the information given, and this is a serious lack. This chapter needs a lot of work in terms of material missing or not explained. On the issue of EACs, some cautionary explanations should be given concerning their use. The report is now using these values without any explanation or cautionary statements.

Offshore chemicals have been dismissed too readily. Considerable work needs to be done on this section. Also, the treatment of the material on PAHs is very uneven, and it is not clear as to which PAHs are covered in all cases.

There appears to be many discrepancies and errors in comparing the material in the text with values in the tables. For sediments, it is not clear the type of sediments for which the values are presented in terms of organic content and size fraction.

Comments on Chapter 5

This chapter needs to be improved in terms of sharpening the linkages with the other chapters. The section on impact of contaminants needs some work, and also needs a summary or conclusion at the end so that it gives a better overview. In some cases, Chapter 6 contains more details than Chapter 5, and there should rather be more detailed material in Chapter 5. More mention should be given to the principles of regulation in OSPAR and to relevant lists, e.g., concerning harmful substances. There is a tremendous imbalance in the material presented in some parts of this chapter. Simply slavishly following the regional QSRs gives a great imbalance in the handling of the topic. Some of these problems go back to the treatment of the material in the regional QSRs, which can be very uneven on any given topic. There are also various problems with the placement of the material that should be sorted out.

Comments on Chapter 6

The balance between Chapters 5 and 6 needs to be considered. There should also be a more holistic assessment based on the regional reports, so that the relative impacts from each major activity can be assessed over all regions. This chapter does not seem to have been correlated with the material in Chapter 2 concerning the climatic issues. Also, there is no information on the impact of climate change on biology.

4.3 Review of Work in Sub-groups

Sub-groups were formed for Chapters 2, 3, 4, and 5 to consider the general scope and prepare specific comments on these chapters. It was agreed that consideration of Chapter 6 should be done after the earlier chapters have received at least some review.

Chapter 2: The sub-group (Chair: H. Loeng) for this chapter stated that they would recommend to OSPAR that this chapter be completely revised, with the omission of material not required for the later chapters, but also with the addition of material that would be of use in later chapters. This includes a more detailed description of the characteristics of the water masses, as well as other relevant information. While some additional material has been drafted by the sub-group, there is not enough time to be able to provide all the material that the sub-group suggested would be needed.

Chapter 3: The sub-group (Chair: E. Jagtman) for this chapter did not have expertise on all aspects covered in the chapter, particularly not on agriculture, or military activities. Most of the chapter was, however, reviewed and a number of comments were made. However, the sub-group did not feel that it was its task to rewrite much of the material. This should be reviewed in the issue-oriented sub-groups.

Chapter 4: The sub-group (Chair: B. Pedersen) for this chapter identified the main problems in this chapter and reviewed the detailed paragraphs. There are no illustrations for the organic contaminants and the illustrations that have been included in the chapter have been prepared in different ways. There should be more results from the temporal trend monitoring programme so that overall trends can be seen, as well as trends in some specific areas. There are a number of questions in relation to the use of EACs that should be discussed in detail later.

Chapter 5: The sub-group (Chair: T. Lang) for this chapter reviewed all parts of this chapter, except for the paragraphs on zoobenthos that have had to be rewritten. All general and specific comments have been inserted into the text of this chapter. The introduction needs to be considered, and new material on harmful algal blooms needs to be drafted. Information on temporal changes is often missing, and it would be very useful to have this information in the chapter. Despite all this work, there is need for strong editorial work on this chapter.

The Chair proposed that the Committee divide into the following issues-related groups (see Annex 6, for details):

<u>Sub-Group 1</u> : Fisheries and mariculture	Chair: R. Millner
<u>Sub-Group 2</u> : Effects on ecosystems and biodiversity	Chair: J. Cross
<u>Sub-Group 3</u> : Hazardous substances	Chair: P. Matthiessen
<u>Sub-Group 4</u> : Eutrophication and climate change	Chair: T. McMahon

4.3.1 Chapter 2

H. Loeng stated that there was inadequate time to do a thorough revision of this chapter. However, there is material included in the regional QSRs that can be used for the revision of this chapter.

The question arose as to how much “textbook” background material should be included in this report. It was noted that this report will be read by an audience that has a varied background, and thus there is scope for the inclusion of some material of this type. One solution is to put some of the textbook material in boxes. It was suggested that this material be flagged using a standard comment, and let OSPAR decide whether the material should remain in the report and in what form.

Noting that the general challenge of this report is to present complex material to a broad audience, it was felt that this report should have a balance between introductory material and more detailed information.

The detailed comments on the paragraphs in Chapter 2 were then discussed. Many were accepted, but further work was requested to provide more detailed suggestions for this chapter.

The lack of mention of seasonal variations in this QSR was felt to be an important missing issue. This will be added to this chapter. There is also a lack of mention of conditions relevant to the occurrence of oxygen depletion in bottom waters. This material could be requested in terms of the rewriting of paragraphs 17 to 23bis.

The ACME requested that the general comments be inserted into the text of Chapter 2. Some parts should be rewritten; the members of the sub-group were encouraged to develop as detailed suggestions as possible for how the paragraphs, particularly paragraphs 17 to 23bis, could be rewritten. Material from the environmental status report prepared by WGOH should be included for paragraphs 38 to 44.

After consideration of several versions of Chapter 2 prepared by the sub-group, the ACME agreed final comments on Chapter 2. It was noted that a fairly large number of paragraphs had been replaced and it was requested that it be clearly stated why the original material had been deleted.

4.3.2 Chapter 3

Detailed comments on this chapter were considered. It was reported that a new version of the fisheries paragraphs has been prepared; this was reviewed somewhat later.

Different terms have been used by the different authors for the various chapters regarding inputs. These terms should be standardized throughout the report.

As a general comment, there is no mention of insoluble contaminants that may be very local, such as leakages of plutonium from wrecked submarines. This could be a significant problem in certain localities.

4.3.3 Chapter 4

Detailed comments on this chapter were considered. A number of paragraphs containing general material were proposed to be removed as this material contained some errors and was also repeated later in the text. The material on trace metals was considered to be generally acceptable, but the treatment of organic contaminants was uneven and lacked adequate tables and diagrams. A number of amendments and additions were agreed.

4.3.4 Chapter 5

General and detailed comments on this chapter were considered, along with a rewritten text on zoobenthos, as the original text had not been revised by OSPAR as indicated in the version of Chapter 5 available to ACME.

Several topics were proposed to be transferred from Chapter 4 to this chapter, primarily in terms of the discussion and use of EACs.

4.3.5 Chapter 6

A new draft of this chapter was received two days before the beginning of the ACME meeting, which completely replaced the previous version. This chapter was reviewed in sub-groups after the reviews of the preceding chapters had essentially been completed.

The ACME considered in plenum the comments on Chapter 6 prepared by the various sub-groups and accepted a number of changes and additions. With regard to the two sentences on the "Limitations in knowledge" under coastal development, it was felt that these very general statements did not begin to cover all the many limitations in knowledge in this area.

The ACME discussed whether the placement of hard structures for offshore oil and gas installations should be considered the first and largest problem in terms of the impact of this industry. It was agreed that this sentence should be rephrased, as the impact of hard structures can be complex and very different from one area to another.

The ACME then reviewed draft overall comments on the QSR 2000 and adopted these comments, with amendments. Thereafter, general comments for each of the six chapters of the QSR 2000 were reviewed and adopted, with some amendment. Finally, the ACME checked the comments on each chapter of the QSR to ensure that all comments had been accurately recorded. These comments were then adopted in final.

The ACME considered a brief section to be included in the 2000 ACME report on the handling of the review of the QSR 2000.

5 **EC DG XIV: CONSIDERATION OF THE REPORT "THE EFFECTS OF DIFFERENT TYPES OF FISHERIES ON THE NORTH SEA AND IRISH SEA BENTHIC ECOSYSTEMS" (LINDEBOOM AND DE GROOT, EDS.)**

The ACME noted that this is a special request received from DG XIV (now called DG FISH) concerning the review of the Lindeboom and de Groot report and, particularly, advice on how the key outcome of this report can be translated into management actions. He stated that the main part of the request is the proposals for management actions. The review of the Lindeboom and de Groot report as prepared by WGECO could be sent to DG FISH as it is, possibly with a brief summary of the main comments.

He noted that this advice should be subject to a moratorium on the release of the report to outside persons, to give the Secretariat time to process the report and check that it is correct. The normal moratorium is 48 hours after the end of the meeting, from midnight on the last day. This would mean that the moratorium would be until midnight Friday, which is inconvenient for ministers. Thus, it was agreed that the moratorium would last until noon, Copenhagen time, on Tuesday, 8 February 2000.

The Chair noted that ACFM had been invited to contribute to the review of the IMPACT II report and the draft advice; the material had been made available to ACFM members on the ICES website on 21 December 1999. ACFM members had been requested to comment to the Chair of ACFM, with a copy to the Fisheries Adviser, by 14 January 2000. However, few if any comments were received.

J. Rice, Chair of WGECO, presented an overview of Section 6 of the 1999 WGECO report, which was drafted by scientists with a wide range of expertise, including benthic biologists, fisheries ecologists, fishing gear specialists, etc. Section 6 represents a full consensus of the participants at the meeting, both in terms of the scientific conclusions and the draft management advice. He then described the report and the general conclusions reached, as well as the management measures proposed based on the results of this review. He noted that no overall summary of the comments had been prepared, as WGECO could not come to an agreement on such conclusions. He also went through the draft advice that he had prepared based on this section of the WGECO report.

In beginning the review of the WGECO report, the Chair stated that ACME needed to provide an overall review of the WGECO work and its draft advice, but that the advice is the responsibility of ACME alone. ACME should attempt to provide a clear message out of the totality of the evidence given in the Lindeboom and de Groot report (hereafter termed IMPACT II report), although this may be difficult to come to agreement on. The WGECO review is very detailed and thorough, but it was conducted under very heavy time pressure. Thus, ACME should carefully consider this review material in terms of what overall effects have been observed and what can be advised on that basis.

J. Rice noted that the request for advice is restricted to the specific gears covered in the IMPACT II report, although there are many other types of gears used that were not covered.

In the discussion, it was agreed that WGEKO conducted a very thorough review of the IMPACT II report, but that it followed very closely the format of the IMPACT II report without providing overview statements on the impacts. In addition, it was felt that more separation should be made between the effects of otter trawls and beam trawls.

In reading the IMPACT II report, the short-term impacts are very clear, but the long-term impacts are not clear.

J. Rice stated that the advice proposed was supposed to achieve “measurable benefits”, thus the advice proposed had this in mind. To this, it was pointed out that managers should be informed as to what these measurable benefits actually would be. In terms of specific advice, especially concerning reduction of effort, the advice of ACFM should also be taken into account that fishing effort should be reduced on flatfish stocks, especially plaice, noting that this is for protection of the fish stocks rather than the non-commercial benthic species.

It was pointed out that it is difficult to give a quantitative assessment of the actual benefit to the benthos of the implementation of management measures, but that qualitative information on the types of benefits can be provided. The benefits should also be linked to the benefits of decreased fishing on the target flatfish stocks, as has already been provided in the WGEKO report.

The ACME then considered Section 6 of the WGEKO report on a detailed basis.

The statement on p. 43 that “It is generally accepted that ecological communities show a dome-shaped response in diversity to a wide variety of perturbations, ...” was questioned. J. Rice stated that there is a large amount of documentation regarding this statement, contained in Section 3.1.4.1 with a number of supporting references. It was agreed that ACME would return to this issue at its June 2000 meeting.

Also on p. 43, the statement “We are concerned about the perception that if fishing stops, an area will recover to something akin to the unimpacted state”, could be used to avoid taking any measures to reduce fisheries impact because it can be seen as useless to restore an area back to its original state. However, it was felt that the concept of returning back to a certain situation is not correct; it is a question of decreasing human impact on an area, using the ecosystem with a minimum of human impact.

Table 6.2.5.1 was considered and it was noted that the value of the “yes” in the various parts of this table was different for each of the topics. In addition, some of the other studies used will be reported in the Proceedings of the Symposium on Ecosystem Effects of Fishing Activities, that will be published in the *ICES Journal of Marine Science* in summer 2000, but were not generally available for citing at the time of the WGEKO meeting last November. The ACME felt that this table is very important, but that it would be useful to simplify the table somewhat, either by combining the columns or by combining the effects studied. It was agreed that J. Rice and R. Millner would work to simplify this table and prepare more explanatory material for the advice in the ACME report.

The ACME later considered the redrafted table. In this context, a distinction was made between impacts in low-energy environments versus high-energy environments. The revised table was accepted with the request that suitable text be prepared to explain the details of the table. Several paragraphs are also needed to summarize the evidence taken together to show that there are the indicated impacts on benthic species and their habitats.

In considering the text of the advice to present on this topic, the ACME agreed that the above table should be presented early on in the advice with the associated explanation. Thereafter, Sections 2 and 3 of the draft advice on this topic should be combined so that all material for similar sub-headings is combined to clarify the presentation. The ACME then reviewed Section 4 of the draft advice, on mitigating the effects of bottom trawls. There was considerable discussion about how to begin the discussion on this topic and the emphasis to be placed on effort reduction versus new gear technologies. On one hand, it was argued that the ACME advice should be formulated in a way that provides choices to managers; on the other hand, the single most effective measure to reduce impact is to reduce fishing effort. A decrease of impact of 30 % was considered to be necessary. It was also pointed out that there are differences between areas, so that measures in high-energy areas will have much less effect than measures in low-energy areas. Thus, managers would be best to implement measures where they will have the greatest effect.

In preparing its advice, it was felt that ACME should consider scientific issues, but not socioeconomic issues as ACME has no expertise in this area. Socioeconomic and political issues will be taken into account by the decision makers if they apply this advice.

The ACME considered Table 3 of the draft advice. This table is a key to managers to determine which types of measures can help with specific types of problems. In the discussion of this table, it was felt that this table was too complex for managers, with too many categories of habitat and species effects. It was noted that the table was based on a 50 % reduction in effort, whereas the text of the WGECO report states that a minimum measurable effect for effort reduction should be 30 %, but the WGECO report does not explain how these figures were derived and why there is a difference between the figures in the text and the table. It was noted that ACFM has adopted 20 % as a minimum reduction in effort that would have a small but measurable effect.

The question was raised as to whether there were any species that were considered to be at risk from trawling in the North Sea or Irish Sea. However, it was noted that WGECO did not have information on species at risk owing to trawling and did not wish to attempt to choose any such species. It was noted that there are programmes such as NATURA 2000 that are intended to identify species at risk. However, it was considered that there are declining trends for some benthos, which justify management measures. It was further felt that studies should be conducted on such species to ensure that management actions are having the anticipated benefits on these species. The Chair stated that consideration should be given to the aims of OSPAR in nature conservation and biodiversity, so that this advice also serves these aims.

In terms of the request that measures be recommended without “unduly reducing the possibilities of catching commercially important species”, it was decided that these possibilities should be related to the ACFM advice on the state of the stocks, many of which are being overfished. It is anticipated that the implementation of measures to protect the benthic environment will ultimately enhance the fishery.

In considering what types of organisms are included in this request, it was clear that non-target benthic organisms are included. In considering whether non-target demersal fish should also be covered, it was noted that the IMPACT II study used sampling gear that sampled all organisms on the seabed and within several metres above the seabed. In order not to complicate the issue by including commercially important demersal fish species, the ACME agreed to a formulation that was somewhat vague. It was agreed that skates and rays would definitely be included, as well as demersal fish species of no commercial value such as dragonet.

In reviewing the draft advice from WGECO, the ACME decided not to include the paragraphs on changes in governance, but incorporated some conclusions from the 1997 Intermediate Ministerial Meeting on the Integration of Fisheries and Environmental Issues.

After the above discussion and a number of amendments proposed to the draft text, the ACME reviewed and accepted final text for the advice for DG XIV. It was noted that this text will be submitted to DG XIV on Tuesday, 8 February after the expiration of the moratorium. It will later be printed as part of the 2000 ACME report.

6 NORDIC COUNCIL OF MINISTERS: “STATUS OF FISHERIES AND RELATED ENVIRONMENT OF NORTHERN SEAS”

H. Lassen stated that the NMC had approached ICES to obtain a review of the state of the fish stocks and related environmental issues in northern seas. This was accepted at the 1998 ASC. The basic idea is to obtain an overview of the system, not to conduct any new data analyses or to criticize what ACFM has done. It is to present an overview of what ACFM and ACME have done, in a non-technical manner that can be understood by the “educated layman”. The emphasis is on the fisheries issues, which is also reflected by the number of pages that have been used for fisheries and for the environmental sections. Although the NMC has not really explained the background for its request, it is anticipated that it will be used for “ecolabelling”. The report should have a longer applicability than annual ACFM reports, but still contain the most recent information possible. The preparation of the draft material was contracted out by the ICES Secretariat to P. Degnbol for the fisheries chapters and C. Symon for the environmental chapters.

C. Symon explained what she had been asked to do in the preparation of the environmental sections on oceanography, eutrophication issues, contaminants, and fish diseases. She had been requested to use existing assessment documents, including the five OSPAR regional QSRs, the Third Periodic Assessment of the Marine Environment of the Baltic Sea, and the OSPAR temporal trend analysis of data on contaminants in biota. Unfortunately, the regional QSRs were not completed until quite late in the year, so she had to work from drafts of these regional reports.

Oceanography: In the review of this material by the ACME, the following comments were made: Text should be added on climate variability in this area, which can be taken from the ICES oceanographic reports; there should also be more about the relationship between oceanographic conditions and distribution and growth of pelagic larvae and migration of

fish stocks. The material on contaminants should be moved to that section. One example related to oceanographic conditions is the more northerly distribution of horse mackerel in the past decade.

There should be a general introduction to the environmental sections, followed by the four environmental sections.

Contaminants: This chapter is not very balanced. There is a great deal of information for the OSPAR area, with many values, but not many values for the Baltic Sea.

Eutrophication: There needs to be greater consistency between the QSR 2000 and this report for the NMC.

The impression given by this material is that there is a lot of focus on mariculture and it was suggested that there should be somewhat less focus on mariculture than presently given.

It was suggested that there be a conclusions section for the environmental issues.

P. Degnbol then gave a brief introduction to his work on the fisheries section of this report. He stated that it had been difficult to summarize the very large amount of material on fisheries into a fairly brief report.

It was questioned whether information on stocks that ICES has not been requested to give advice on should also be included, e.g., *Pandalus* in the Barents Sea and shrimps in Icelandic waters. H. Lassen stated that the contract with NMC requested information on stocks that ICES assesses, but did not provide for information on other stocks. However, it could be useful to provide an overview of all fish stocks in the areas covered.

It was proposed that some information be included on the effects of small spawning stock biomass on the reproductive potential of the stock, e.g., the impact on females of spawning at younger ages, and the genetic impact of spawning at earlier ages on the stock as a whole. There are many factors involved, and it was proposed that some mention be made in the text of environmental factors that affect recruitment. This could then be linked to a description in the environmental section on the oceanographic and climatic factors affecting recruitment, growth and distribution of fish stocks. However, the treatment in the draft fisheries section of the NMC report represents the work that has been conducted to date in the development of a better understanding of the basis for the Precautionary Approach.

It was noted that the development of the Precautionary Approach has been conducted by fisheries scientists, and there is a need to have environmental scientists involved in the further enhancement of this Approach.

To draw the section on sustainability to a close, it could be useful to point to the changes that need to be made to the regulatory regime in the future to take account of the implications of work on multispecies sustainability.

After the discussion of the draft sections on fisheries and the environment of this report, the consultants were given all written comments on their material. They then reviewed these comments and prepared amended texts of their sections.

The fisheries section was reviewed and accepted with a number of small amendments. The environmental section was reviewed and various changes were proposed. It was noted that no graphs or figures had yet been prepared for the environmental section and that the section on contaminants was much too technical, with many data on contaminant concentrations in various fish species and mussels. It was also pointed out that it would be useful to have an introduction to the environmental section, and possibly also some conclusions. The ACME felt that the material on oceanography, eutrophication, and fish diseases was essentially final, but that some further work needed to be done on the presentation of the material on contaminants.

A second revision of the environmental report was reviewed and essentially accepted. It was noted that further work was still needed to improve the balance of the material and its presentation; illustrations are also needed.

It was noted that the environmental material needs to be merged together with the fisheries material. This will be done by the Secretariat together with the consultants and a final report will be prepared by 24 February 2000.

A draft section for the 2000 ACME report was prepared, but it was agreed that this should be posted on the ACME website for review and comment several weeks after the meeting. This will then constitute final adoption of this section for the 2000 ACME report.

7 CONSIDERATION OF REQUEST FOR CO-SPONSORSHIP OF OSPAR WORKSHOPS ON HABITAT ISSUES

The ACME recalled that there was a joint OSPAR/ICES/EEA Workshop on Marine Habitat Classification and Biogeographic Regions, held in Oban, Scotland in September 1999. This was a successful workshop, however, further work is necessary on the details of the classification, based on the EUNIS classification system. Habitat mapping is also an important part of this work, as classifications of areas also need to be mapped out. There was a proposal for two workshops, one on habitat mapping, concentrating on survey technologies, and the other for a second workshop on habitat classification.

The OSPAR Environmental Assessment and Monitoring Committee (ASMO) reviewed the recommendations for these two workshops, but only supported the proposal for the workshop on habitat classification. Accordingly, OSPAR has requested ICES to consider whether it is willing to co-sponsor a second OSPAR/ICES/EEA Workshop on Marine Habitat Classification.

The ACME noted that the Study Group on Marine Habitat Mapping (SGMHM) will consider these issues when it meets in April 2000, and agreed that SGMHM should cooperate with the Working Group on Effects of Extraction of Marine Sediments on the Marine Ecosystem (WGEXT) especially in terms of habitat mapping and survey technologies. The ACME noted that this is important work and requested SGMHM to review the plans for the proposed ICES/OSPAR Workshop on Deep-Sea Survey Technologies and the Development of Standards for Marine Habitat Mapping. The ACME will then return to this topic at its June 2000 meeting.

With regard to the proposed Workshop on Marine Habitat Classification, the ACME agreed that it is important to continue this work in cooperation with OSPAR and recommended that ICES accept the invitation to co-sponsor this workshop.

8 REVIEW AND ADOPTION OF THE MINUTES

The ACME reviewed draft minutes for the meeting. Several comments were made, and the minutes were provisionally adopted. However, it was agreed that the amended minutes would be posted on the ACME website by 16 February, with comments due to be sent back to the Secretariat by 15 March 2000.

9 ANY OTHER BUSINESS

There was no other business.

10 CLOSING OF THE MEETING

The Chair thanked the members for their very hard and productive work at the meeting. He also thanked the Secretariat staff for their efficient assistance at the meeting.

He looked forward to working with ACME at the June 2000 meeting, noting that the advisory structure is under review by the Bureau Working Group on the Advisory Process.

The Chair closed the meeting at 17.00 hrs on Wednesday, 2 February 2000.

ANNEX 1: LIST OF PARTICIPANTS

Participant	Affiliation
Prof. H.R. Skjoldal	Chair
Dr A. Calabrese	Chair, Mariculture Committee
Dr H. Loeng	Chair, Oceanography Committee
Dr K. Cooreman¹, Dr F. Redant¹	Belgium
Dr P. Keizer	Canada
Mr E. Hoffmann	Denmark
Dr E. Ojaveer	Estonia
	Finland
Dr S. Maestrini	France
Dr T. Lang	Germany
Dr S. Steingrímsson¹, Mr H. Eiríksson¹	Iceland
Mr T. McMahon	Ireland
Dr A. Yurkovskis	Latvia
Dr E. Jagtman	Netherlands
Mr T. Jakobsen	Norway
Dr E. Andrulewicz	Poland
Dr C. Lima	Portugal
Dr S.A. Patin	Russia
Dr T. Nunes	Spain
Mr B. Sjöstrand	Sweden
Dr R. Millner	United Kingdom
Dr J. Cross	United States of America
Dr J. Rice²	Chair, WGECO
Dr P. Matthiessen²	Chair, WGBEC
Dr B. Pedersen²	Chair, MCWG
Dr J. Pawlak	ICES Environment Adviser
Dr J. Nørrevang Jensen	ICES Environmental Data Scientist
Dr H. Lassen	ICES Fisheries Adviser
Dr K. Brander	ICES GLOBEC Coordinator
Dr H. Dooley	ICES Oceanographer

¹Attended part-time. ²Invited expert.

Finland was not represented at the meeting.

The Chair of the Marine Habitat Committee, Dr A. Jarre, was unable to attend.

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ANNEX 2: TERMS OF REFERENCE

ICES C.Res. 1999/2:ACME:01

The **Advisory Committee on the Marine Environment** [ACME] (Chair: Prof. H.R. Skjoldal, Norway) will meet:

A) at ICES Headquarters from 26 January to 2 February 2000 at Council expense to:

- i. conduct a scientific peer review of the OSPAR Quality Status Report (QSR) 2000, according to specifications contained in the 1999 ICES Work Programme from OSPAR,
- ii. conduct a review of the report on the Status of Fisheries and Related Environment of Northern Seas, prepared at the request of the Nordic Council of Ministers,
- iii. conduct a review of the IMPACT II report by H.J. Lindeboom and S.J. de Groot for DG XIV of the European Commission.

NA {OSPAR 50%, NCM 33%, EC DGXIV 17%}

OSPAR WORK PROGRAMME FOR 2000

1 SCIENTIFIC PEER REVIEW OF THE QSR 2000

1.1 *To arrange a special ACME meeting to conduct a scientific peer review of QSR 2000 with the following aims:*

- a. to establish the scientific veracity of the contents;*
- b. to assess if the material is presented in a logical and clear sequence;*
- c. to determine if the methods used to back-up scientific statements are based on recognised, documented and quality controlled techniques;*
- d. to check if all figures and tables are correctly cited in the text and that their legend provides an adequate explanation of the content;*
- e. to comment on the style of illustrations, to identify if they are too complicated or lack clarity and to suggest, where necessary, ways in which they may be improved;*
- f. to check if all statements that should be referenced are adequately cited;*
- g. to identify where drafters have not complied with the agreed instructions to authors.*

To present the results through the following two stage approach:

- a. to provide, following the special ACME meeting, a draft report of the review to ACG for comment;*
- b. to respond to ACG requests for additional information or clarification of specific points;*
- c. to complete, on receipt of comments from ACG, a report in a structure determined by ACG and containing the final review, and forward it for consideration at ASMO(3) November 1999.*

At the request of OSPAR, the ACME meeting at which the scientific peer review of the OSPAR QSR 2000 was scheduled to take place has been postponed from November 1999 to January 2000. Thus, the response to this request will be published in the ACME report for the year 2000.

ANNEX 3: AGENDA

ACME SPECIAL MEETING

26 January–2 February 2000

ICES Headquarters

- 1 Opening of the meeting (Chair).
- 2 Adoption of the agenda and timetable.
- 3 Organizational and procedural issues.
 - 3.1 Minutes of the meeting.
 - 3.2 Format of advice.
- 4 OSPAR: Review of QSR 2000.
 - 4.1 Criteria and procedures; form of review and product.
 - 4.2 Chapter 1–Introduction and Scope
 - 4.3 Chapter 2–Geography, Hydrography and Climate
 - 4.4 Chapter 3–Human Activities (including fisheries, mariculture, sand and gravel extraction, dumping, oil and gas industry, shipping, and land-based activities)
 - 4.5 Chapter 4–Chemistry (including inputs, concentrations of contaminants in biota, sediments, and sea water)
 - 4.6 Chapter 5–Biology (including general description of ecosystem of OSPAR Area, impact of human activities: harmful algae, fisheries, mariculture, eutrophication, dredging, offshore activities, and contaminants)
 - 4.7 Chapter 6–Overall Assessment, and Executive Summary
 - 4.8 Approval of peer review of QSR 2000.
- 5 EC DG XIV: Consideration of the report “The effects of different types of fisheries on the North Sea and Irish Sea benthic ecosystems” (Lindeboom & de Groot, eds.).
 - 5.1 Review of report prepared by WGECO.
 - 5.2 Consideration and adoption of management advice for the reduction of effects of bottom gears on benthic ecosystems.
 - 5.3 Approval of extract for ACME report.
- 6 Nordic Council of Ministers: “Status of Fisheries and Related Environment of Northern Seas”.
 - 6.1 Overall compilation and editing of document.
 - 6.2 Preparation of Overall Conclusions and/or Executive Summary.
- 7 Consideration of request for co-sponsorship of OSPAR Workshops on habitat issues.
- 8 Review and adoption of the Minutes.
- 9 Any other business.
- 10 Closing of the meeting.

Annotations to the Agenda

4. OSPAR: Review of QSR 2000.

The review of the OSPAR QSR 2000 will include *general* comments for each chapter as well as *specific* comments for each chapter on a line-by-line basis. The precise form of how the review will proceed and the resulting product will be delineated at the meeting.

All comments submitted prior to the meeting (deadline Monday 24 January at noon Central European time) will be compiled and distributed at the opening session on Wednesday, 26 January.

5. EC DG XIV: Consideration of the report "The effects of different types of fisheries on the North Sea and Irish Sea benthic ecosystems" (Lindeboom & de Groot, eds.).

DG XIV has requested that ICES review this document with a view to formulating management advice as to how the effects of the gears discussed in the report on benthic ecosystems could be measurably reduced without unduly reducing the possibilities of catching commercially important species.

The Lindeboom & de Groot report was thoroughly reviewed by the Working Group on Ecosystem Effects of Fishing Activities at its meeting from 22 November to 1 December 1999. That review comprises Section 6 of the 1999 WGECO report, which is the background document for this agenda item.

Five copies of the Lindeboom & de Groot report will be available at the meeting as reference material.

6. Nordic Council of Ministers: "Status of Fisheries and Related Environment of Northern Seas".

The Nordic Council of Ministers has contracted ICES to compile existing information on the status of fisheries and the related marine environment in northern seas. ICES has engaged two private consultants to carry out the initial drafting of the report. The environmental chapters have been drafted by Carolyn Symon and are based on previous ACME reports as well as relevant OSPAR and HELCOM documents. The fisheries chapters have been compiled by Paul Degnbol and are based on the 1998 ACFM report.

The main issue for consideration of this report is whether the information presented is complete, well-balanced, and accurate. If not, what additional (already existing) information should be added, or what corrections should be made.

7. Consideration of request for co-sponsorship of an OSPAR Workshop on habitat issues.

ICES' interest in habitat issues has come to prominence with the establishment of the Study Group on Marine Habitat Mapping (SGMHM) in 1998 [ICES C.Res. 1998/2:39]. The remit for SGMHM includes consideration of a habitat classification for the ICES area (e.g., in cooperation with OSPAR IMPACT) and development of a plan of action that can assist the Marine Habitat Committee in achieving its scientific objectives.

The OSPAR/ICES/EEA Workshop on Habitat Classification and Biogeographic Regions in September 1999 was co-sponsored by ICES and was held in conjunction with the 1999 meeting of SGMHM. After that meeting, SGMHM recommended that ICES co-sponsor further workshops on this topic with OSPAR and the EEA. A joint Workshop has been proposed for 2000.

PROVISIONAL TIMETABLE FOR SPECIAL ACME MEETING

26 January–2 February 2000

Wednesday 26 January	09.30–18.00	<p>Opening of the Meeting Agenda Items 1, 2, 3 Agenda Item 4, <i>Review of OSPAR QSR 2000: Overall Introduction</i> Agenda Item 4.1, <i>Criteria and Procedures</i> Agenda Item 4.2–4.7, <i>Chapters 1 to 6 of the OSPAR QSR 2000</i></p> <p>The review will begin with a plenary discussion of each chapter, including general comments, scope and balance, gaps in material, new material required, etc.</p> <p>After plenary consideration of all chapters, subgroups will be formed for detailed consideration of each chapter, with subsequent regrouping to consider the treatment of specific topics throughout all chapters.</p> <p>Comments should be provided in a constructive manner, proposing new text where possible or indicating where missing material can be found.</p>
Thursday 27 January	09.00–18.00	Agenda Item 4, <i>Review of OSPAR QSR 2000</i> (continued)
Friday 28 January	09.00–18.00	Agenda Item 4, <i>Review of OSPAR QSR 2000</i> (continued)
Saturday 29 January	09.00–[16.00]	<p>Finalization of Agenda Item 4 and approval of <i>Peer Review of QSR 2000</i></p> <p>During this week, it is also intended that some consideration be given to the material for Agenda Item 6, the report <i>Status of Fisheries and Related Environment of Northern Seas</i> for the Nordic Council of Ministers, so that detailed comments and suggestions can be provided on 31 January.</p>
Sunday 30 January	No formal sessions scheduled	
Monday 31 January	<p>09.00–11.00</p> <p>11.00–18.00</p>	<p>Agenda Item 6, <i>Status of Fisheries and Related Environment of Northern Seas</i>, report for the Nordic Council of Ministers</p> <p>Overall background: H. Lassen (ICES Fisheries Adviser) Environmental sections: C. Symon (Consultant) Fisheries sections: P. Degnbol (Consultant)</p> <p>Discussion and Comments</p> <p>ACME members should be prepared to provide detailed comments on the substance and balance of the material provided for this report and indicate any topics or areas for which new material should be provided. The consultants will then be requested to amend their sections based on the ACME comments and to compile the overall report, for initial distribution on the afternoon of 1 February.</p> <p>Agenda Item 5, review of the report <i>The effects of different types of fisheries on the North Sea and Irish Sea benthic ecosystems</i> (Lindeboom & de Groot, eds.) and preparation of advice for EC DG XIV</p> <p>Section 6 of the 1999 WGECO report: J. Rice (WGECO Chair)</p> <p>Discussion and Comments by ACME</p>
Tuesday 1 February	09.00–18.00	Agenda Item 5 (continued)
Wednesday 2 February	09.00–[17.00]	<p>Agenda Item 6, Adoption of the report <i>Status of Fisheries and Related Environment of Northern Seas</i> for the Nordic Council of Ministers</p> <p>Agenda Item 5, Adoption of advice to DG XIV</p> <p>Agenda Items 7–10</p> <p>Closing of the Meeting</p>

ANNEX 4: RAPPORTEUR ASSIGNMENTS FOR THE QSR 2000 PEER REVIEW**

Item No.	Agenda Topic	Chapter No.	Chapter Title	Rapporteur(s)
1	Opening of the meeting.			Chair
2	Adoption of the agenda and timetable.			
3	Organizational and procedural issues.			
3.1	Minutes of the meeting.			
3.2	Format of advice.			
4	OSPAR: Review of QSR 2000.			
4.1	Criteria and procedures, form of review and product.			
4.2	Chapter 1–Introduction and Scope			Keizer, McMahon
4.3	Chapter 2–Geography, Hydrography and Climate			Loeng, McMahon
4.4	Chapter 3–Human Activities (including fisheries, mariculture, sand and gravel extraction, dumping, oil and gas industry, shipping, and land-based activities)			Jagtman
		3.1	Introduction	Jagtman
		3.2	Demography	Jagtman
		3.3	Conservation	Jagtman, Ojaveer
		3.4	Tourism/Recreation	Jagtman, Ojaveer
		3.5	Fisheries	Sjöstrand, Kirkegaard, Bjørge, Millner, Rice
		3.6	Mariculture	Calabrese, Hoffmann, Keizer
		3.7	Coastal engineering/land reclamation	Jagtman
		3.8	Sand + Gravel	Andrulewicz, Yurkovskis
		3.9	Dredging/dumping/discharges	Andrulewicz, Cooreman
		3.10	Oil + gas industry	Matthiessen, Patin
		3.11	Shipping	McMahon, Patin
		3.12	Coastal industries	Nunes, Jagtman
		3.13	Military activities	Nunes, Jagtman
		3.14	Land-based activities	Pedersen, Hällfors, Yurkovskis
		3.15	Agriculture	Pedersen, Hällfors, Yurkovskis
		3.16	Regulatory Measures	Cooreman, Matthiessen, Jagtman
4.5	Chapter 4–Chemistry (including inputs, concentrations of contaminants in biota, sediments, and sea water)			Ólafsson
		4.1	Introduction	Ólafsson
		4.2	Input of contaminants	Nunes, Loeng
		4.3	Background/Ref. concentrations	Ólafsson, Matthiessen
		4.4	Trace metals	Pedersen, Ólafsson
		4.5	Organic pollutants	Nunes, Andrulewicz, Cooreman
		4.6	Multiple Chemical inputs	Calabrese, Matthiessen
		4.7	Oil	Matthiessen, Patin
		4.8	Radioactivity	Ólafsson, Pedersen

* These were the initial assignments for rapporteurs; not all persons mentioned here ultimately attended the meeting.

Rapporteur Assignments for the QSR 2000 Peer Review (Continued)

Item No.	Agenda Topic	Chapter No.	Chapter Title	Rapporteur(s)
		4.9	Nutrients + Oxygen	Loeng, Hållfors, Yurkovskis
4.6	Chapter 5–Biology (including general description of ecosystem of OSPAR Area, impact of human activities: harmful algae, fisheries, mariculture, eutrophication, dredging, offshore activities, and contaminants)			Lang (overview)
		5.1	General description	Bjørge
			Plankton	Hållfors
			Benthos	Keizer
			Fish	Sjöstrand, Ojaveer
			Birds, mammals, turtles	Bjørge
		5.3	Impact of human activities	Cross (overview)
			Non-indigenous species	McMahon, Maestrini
			Harmful Algae	Maestrini, Hållfors
			Microbiological pollution	McMahon, Lang
			Impact of fisheries	Sjöstrand, Kirkegaard, Bjørge, Millner, Cross, Rice
			Impact of Mariculture	Calabrese, Keizer
			Impact of Eutrophication	Hållfors, Yurkovskis, Maestrini
			Recreation + tourism	Jagtman, Bjørge
			Sand + gravel	Andrulewicz, Keizer
			Dredging/dumping	Andrulewicz, Cooreman
			Coastal protection/reclamation	Jagtman, Lima
			Offshore activities	Keizer, Matthiessen
			Contaminants	Cooreman, Matthiessen, Patin, Ólafsson
			Litter	Bjørge
4.7	Chapter 6–Overall Assessment, and Executive Summary			Cross, Matthiessen
		6.1	Introduction	Patin
		6.2	Ecosystems and Biological Diversity	Jagtman, Lima
		6.2.1	Introduction	Lima, Jagtman
		6.2.2	Fishing	Kirkegaard, Sjöstrand, Ojaveer, Millner, Rice
		6.2.3	Mariculture	Calabrese, Keizer
		6.2.4	Coastal development	Jagtman, Lima
		6.2.5	Offshore development	Keizer, Matthiessen
		6.2.6	Litter	Bjørge, Lima
		6.2.7	Microbiological contamination	McMahon, Lang
		6.2.8	Shipping	Lima, Patin
		6.2.9	Non-indigenous species	McMahon, Maestrini
		6.2.10	Dredging/dumping	Andrulewicz, Cooreman
		6.2.11	Mineral exploitation	Andrulewicz, Keizer
		6.2.12	Limitations in knowledge	All persons reviewing 6.2 sections

Rapporteur Assignments for the QSR 2000 Peer Review (Continued)

Item No.	Agenda Topic	Chapter No.	Chapter Title	Rapporteur(s)
		6.3	Hazardous substances	Cooreman, Pedersen (overview)
		6.3.1	Introduction	Cooreman, Pedersen
		6.3.2	Tributyltin	Matthiessen, Cooreman
		6.3.3	PAHs	Andrulewicz, Cooreman
		6.3.4	PCBs	Nunes, Cooreman
		6.3.5	OCI Pesticides	Nunes, Matthiessen
		6.3.6	Metals	Pedersen, Ólafsson
		6.3.7	Others	Matthiessen
		6.3.8	Limitations in knowledge	All persons reviewing 6.3 sections
		6.4	Radioactive substances	Pedersen, Patin
		6.5	Eutrophication	Hällfors, Maestrini, Loeng, Andrulewicz, Yurkovskis
		6.6	Offshore activities	Keizer, Matthiessen, Loeng
		6.7	Climate change	Loeng, Brander
		6.8	Other issues	Andrulewicz, McMahon
		6.9–6.11		Cross, Matthiessen and all members
4.8	Approval of peer review of QSR 2000.			
5	EC DG XIV: Consideration of the report “The effects of different types of fisheries on the North Sea and Irish Sea benthic ecosystems” (Lindeboom & de Groot, eds.).			
5.1	Review of report prepared by WGECO.			Presentation: Rice Review: Sjöstrand, Kirkegaard, Millner, Cross, Keizer, Lang, Redant
5.2	Consideration and adoption of management advice for the reduction of effects of bottom gears on benthic ecosystems.			Kirkegaard, Sjöstrand, Millner, Rice, Cross, Keizer, Redant
5.3	Approval of extract for ACME report.			All members
6	Nordic Council of Ministers: “Status of Fisheries and Related Environment of Northern Seas”.			
6.1	Overall compilation and editing of document.			Sjöstrand, Millner, Lang, Loeng, Andrulewicz, Ólafsson, Nunes, Cooreman
6.2	Preparation of Overall Conclusions and/or Executive Summary.			Sjöstrand, Millner, Lang, Loeng, Andrulewicz, Ólafsson, Nunes, Cooreman
7	Consideration of request for co-sponsorship of OSPAR Workshops on habitat issues.			Jagtman
8	Review and adoption of the Minutes.			
9	Any other business.			
10	Closing of the meeting.			

ANNEX 5: SUB-GROUP ASSIGNMENTS FOR THE OSPAR 2000 QSR PEER REVIEW*

Sub-Group 1 Millner , Sjøstrand, Ojaveer, Rice, Calabrese, Hoffmann	
Fishing	6.2.2
Mariculture	6.2.3
Sub-Group 2 Jagtman, Lima, Lang, Andrulowicz, Patin, Cross	
Coastal development	6.2.4
Offshore developments	6.2.5
Litter	6.2.6
Microbiological contamination	6.2.7
Shipping	6.2.8
Non-indigenous species	6.2.9
Dredging and dumping of dredged material	6.2.10
Mineral exploitation	6.2.11
Sub-Group 3 Pedersen, Cooreman, Nunes, Keizer, Matthiessen	
Hazardous substances	6.3
▪ TBT	6.3.2
▪ PAHs	6.3.3
▪ PCBs	6.3.4
▪ Organochlorine pesticides	6.3.5
▪ Other hazardous substances	6.3.7
Radioactive substances	6.4
Sub-Group 4 McMahon , Maestrini, Yurkovskis, Loeng, Steingrímsson	
Eutrophication	6.5
Climate change	6.7
Offshore activities	6.6
Other issues	6.8
▪ Harmful algae	6.8.1
▪ Dumping of munitions	6.8.2

* The Chair of each Sub-group is indicated in bold.

ANNEX 6: LIST OF MEETING DOCUMENTS

Document Code	Full Title
ACME 2000/1/Rev.3	Adopted Agenda
ICES CM 2000/ACME:02	Section 6: Bottom trawl impacts on the benthos in the North Sea and Irish Sea
NIOZ-Rapport 1998-1	IMPACT-II: The effects of different types of fisheries on the North Sea and Irish Sea benthic ecosystems (Ed. by H.J. Lindeboom and S.J. de Groot.)
	Draft Report for the Nordic Council of Ministers: Environment (Prepared by C. Symon.)
	Draft Report for the Nordic Council of Ministers: The Status of Fisheries of Northern Seas (Prepared by P. Degnbol.)
ASMO 00/2/Info.1-E	Quality Status Report 2000 – Draft 2, Version 2: Chapter 2 – Geography, Hydrography and Climate
ASMO 00/2/Info.2-E	Illustrations
ASMO 00/3/Info.1-E	Quality Status Report 2000 – Draft 2, Version 2: Chapter 3 – Human Activities
ASMO 00/3/Info.2-E	Tables
ASMO 00/3/Info.3-E	Illustrations
ASMO 00/4/Info.1-E	Quality Status Report 2000 – Draft 2, Version 2: Chapter 4 – Chemistry
ASMO 00/4/Info.2-E	Tables
ASMO 00/4/Info.3-E	Illustrations
ASMO 00/4/Info.4-E	Background on Chapter 4 and the outcome of ASMO(3) 1999
ASMO 00/5/Info.1-E	Quality Status Report 2000 – Draft 2, Version 2: Chapter 5 – Biology
ASMO 00/5/Info.2-E	Tables
ASMO 00/5/Info.3-E	Illustrations
ASMO 00/5/Info.1-Add.1	Last minute amendments
ASMO 00/6/Info.2-E	Quality Status Report 2000 – Draft 2, Version 2: Chapter 6 – Overall Assessment (DRAFT 2) Starting point for further discussion
IMPACT 99/15/1, Annex 7	Draft terms of reference and preparatory activities for a second OSPAR/ICES/EEA Workshop on Marine Habitat Classification
IMPACT 99/15/1, Annex 8	Draft terms of reference and preliminary work programme for an ICES/OSPAR Workshop on Deep Sea Survey Technologies and the Development of Standards for Marine Habitat Mapping