MINUTES OF THE

ADVISORY COMMITTEE ON THE MARINE ENVIRONMENT

ICES Secretariat

16-20 June 2003

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International Council for the Exploration of the Sea

Conseil International pour l'Exploration de la Mer

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1 OPENING OF THE MEETING

The Chair, Stig Carlberg, opened the meeting at 9.30 hrs and welcomed the participants. The members introduced themselves, indicating their areas of scientific work. The list of participants is attached as Annex 1.

2 ADOPTION OF THE AGENDA AND SCHEDULE OF THE MEETING; DESCRIPTION OF PROCEDURES

The ACME reviewed the agenda. The addition of the Thirteenth Dialogue Meeting was made to any other business, after which the agenda was adopted.

The procedures to be used for the meeting were discussed. The new procedure of working in sub-groups for the first part of the meeting was discussed. In terms of minutes for the sub-group meeting, it was stated that for each item, the status of the report section should be recorded as well as a mention of whether there are any controversial issues that have arisen. There would be a plenary session on Tuesday morning to review whether there are any problems that have arisen and to check the status of the work.

There was a proposal that the report sections be restructured so that the recommendations and advice are provided early on in the report section, rather than at the end, as has been the case in the past. The ACME agreed to apply this new structure. In discussing the report, the question was raised as to how much material from working groups should be included in the ACME report. It was stated that the report should contain enough background material so that there is a clear basis for the recommendations and advice. This material should not be simply a cut-and-paste version of the working group report, but should contain some added value based on the review and discussion by ACME.

There was discussion on the development of advice by ACME. It was emphasized that advice is quite different from the preparation of summaries of scientific results. On the environmental side of ICES there is less of a clear tradition for formulating advice to be used by management. In this context, it is imperative that the working groups provide the material to serve as the basis for advice in as clear a manner as possible and ACME should ensure that the terms of reference for working groups serve this purpose.

3 REQUESTS FROM REGULATORY COMMISSIONS AND MEMBER GOVERNMENTS

3.1 OSPAR Commission

The 2003 Work Programme for ICES from the OSPAR Commission was reviewed. Some of the items had already been handled by ACE at its meeting in May; the remaining items will be handled by ACME this week. A sub-group was set up under J. Rice to prepare material on potential contributions from ICES for the implementation of the OSPAR Joint Assessment and Monitoring Programme, which was a request not on the official Work Programme.

3.2 Helsinki Commission

The 2003 requests to ICES from the Helsinki Commission were reviewed. Some of the items had already been handled by ACE at its meeting in May; the remaining items will be handled by ACME this week.

4 INFORMATION REGARDING OTHER FORA

4.1 Arctic Monitoring and Assessment Programme

H. Loeng provided an update on the activities of AMAP in the preparation of assessment reports on various aspects of the Arctic environment. Several reports will be published this year. There is now a proposal that such reports be prepared on a longer time frame.

H. Loeng also mentioned the Arctic Climate Impact Assessment, for which he is preparing the marine chapter. The final report is expected to be printed in late autumn 2004 and will be released in association with a Ministerial meeting. This assessment report will be a very large volume, but there will also be a summary for the public as well as a policy document for policy-makers.

4.2 EEA and Inter-Regional Forum

J. Pawlak provided an update of the interactions between ICES and the European Environment Agency, particularly in relation to the preparation of indicators. On the basis of agreements with Member Countries, ICES provides OSPAR and HELCOM data on contaminants in biota and sediments, and nutrients in sea water for the preparation of indicators. ICES has also been consulted by the EEA on the issue of fisheries indicators.

In terms of fisheries indicators, ICES does not agree with the way that the EEA is attempting to develop indicators, as they are too simple to convey an appropriate message, particularly in relation to the biological issues. However, the EEA is also interested in social and economic indicators in relation to fisheries, areas for which ICES does not traditionally have expertise. ICES will need to reflect on the growing need to cover socio-economic issues in relation to fisheries and the environment.

Des; puite the difference of views with the EEA on indicators, ICES will need to try to provide some positive assistance to enhance the scientific validity of these indicators. Criticism of the EEA indicators has also been levelled by OSPAR and its subsidiary bodies, but nonetheless OSPAR has agreed that data collected for its programmes can be provided for the use of the EEA.

4.3 UNEP Convention on POPs

R. Law reported that at the end of March 2003 a workshop was held to develop proposals for a monitoring programme on POPs in the global marine environment. This workshop divided up into five working groups to prepare proposals on matrices to be sampled, chemicals to be monitored, and the handling of the data.

The proposals from this workshop will be reviewed by the Conference of Parties to the Stockholm Convention with the aim of establishing the appropriate system for monitoring the POPs covered by the Convention.

4.4 Global Ocean Observing System (GOOS), including progress in SGGOOS and plans for NORSEPP

H. Loeng presented information on the outcome of the meeting of PGNSP and the SGGOOS. He was concerned about the slow progress of NORSEPP. The Planning Group should have finished its work this year, but it has obviously not finished. He felt that more rapid progress should be made. SGGOOS did not devote much time to discussing the plans for NORSEPP. SGGOOS should be encouraged to be more concrete in its work and to move forward more quickly, or GOOS will leave ICES aside. There is also a lack of fisheries people participating in the GOOS work and their participation should be encouraged.

- J. Rice noted that participation in GOOS activities was discussed in ACE, and a section of its report is relevant. ACFM also briefly discussed GOOS and noted that without the participation of fisheries scientists it would be impossible to meet the goals of NORSEPP. Potential participants are already over-worked owing to the failure of the fisheries management system; their lack of participation is not due to a lack of interest, but to a serious lack of time. There needs to be a concrete proposal to find a way that fisheries expertise can be obtained in the light of this work load. Also, there are some countries that are not represented at the NORSEPP meetings; there needs to be some feedback on why these countries are not attending these meetings.
- H. Loeng presented a draft section for the ACME report in case the ACME would like to include some of this material.

The ACME decided to include this text in its report and request that the Consultative Committee consider GOOS activities when it discusses the implementation of the Action Plan.

Consideration was given to how the message of the need for participation of fisheries scientists in the work of GOOS and NORSEPP should be brought forward in order to have some effect. It was felt that the ACME minutes are not a particularly effective means of bringing forward this message, but it is one vehicle for reaching the Delegates and the Chairs of the other Committees.

It was pointed out that fisheries scientists are trying to bring in more environmental information into their work, and now NORSEPP is trying to bring in fisheries scientists into its work. It would be useful to bring these together.

J. Rice reported that in ACE the discussion on an ecosystem approach to management concentrated on trophodynamic effects of fishing on the ecosystem, while at ACFM the discussion concentrated on the fleet issue in terms of

developing an ecosystem approach to management. Thus, these two groups discussed ostensibly the same topic from completely different aspects, emphasizing the vast gap between the perception of this issue by different groups.

In terms of the ICES relationship with IOC, it was noted that the Memorandum of Understanding between ICES and IOC is now outdated and needs to be revised. The role of ICES in GOOS will be taken up in the context of the revision of this MoU. However, GOOS is unfolding in different ways in different areas and the direction that GOOS will take in the ICES area is currently unclear.

The ACME is concerned about the very slow progress of NORSEPP, and expects that next year's meeting of PGNSP will finalize an implementation plan for the project. The ACME also expects that SGGOOS will take the necessary action to secure that this important initiative will be an active and successful project.

4.5 GEF Baltic Sea Regional Project (BSRP)

E. Andrulewicz reported that an agreement was signed between HELCOM and the World Bank in March 2003, so that the project has now been formally funded. ICES has established a group under the Baltic Committee to coordinate the relationship between ICES and the BSRP.

4.6 Global International Waters Assessment (GIWA)

E. Andrulewicz provided an update on GIWA assessment activities, which are developed on the basis of an agreed mechanism of assessment, beginning with the use of the DPSIR indicator system and continuing with a Causal Change Analysis (covering socio-economic analysis) and finally a policy analysis. The reports for several regions are now nearing completion, but there are many questions in relation to the economic analyses.

5 MONITORING TECHNIQUES AND GUIDELINES

5.1 Biological effects monitoring

5.1.1 Results of the Sea-Going Workshop on Pelagic Biological Effects Methods

K. Cooreman presented a draft section for the report based on material from WGBEC. He noted that WGSAEM had also considered this issue, reviewing a preliminary statistical evaluation of the data; there is a good summary of the BECPELAG workshop, in PowerPoint format, in the WGSAEM report.

The ACME decided to include the material from the PowerPoint presentation in this section, in the format of ordinary text. Several other amendments were agreed and, with these amendments, the ACME agreed to include this section in its report.

5.1.2 Review and adoption of criteria for the incorporation of externally visible diseases and benthos communities into monitoring programmes on biological effects

K. Cooreman presented material for this item based on WGBEC, noting that other relevant working groups (WGPDMO, BEWG) have not had a chance to review these new criteria. The ACME decided that relevant information from this section should be incorporated into the material for agenda item 5.1.3.

5.1.3 Tables for recommended and promising methods for biological effects monitoring, including recommendations for methods that can be included in the OSPAR Coordinated Environmental Programme (CEMP)

K. Cooreman presented material for this item based on the WGBEC report.

The ACME discussed the tables contained in this section, particularly the problem of a lack of information on the status of intercalibrations for several of the methods. It was also pointed out that OSPAR has identified a number of biological effects methods for inclusion in the Coordinated Environmental Monitoring Programme, but most of these methods have not been formally included in the programme pending the attainment of an adequate level of comparability and the development of QA protocols. The ACME requested a number of amendments to this section based on the discussion.

5.1.4 Other issues regarding biological effects

K. Cooreman presented a draft section for the report based on material from WGBEC. This covered the use of Toxicity Identification and Evaluation (TIE) procedures in monitoring programmes.

The ACME discussed whether the TIE technique should be recommended for use in regulatory situations or whether it should only be used to test its applicability in the field. It was pointed out that the current use of TIE in the UK has been in relation to regulatory use. It is not a general monitoring tool, but a problem-solving tool. The ACME accepted this text with several amendments.

5.2 Techniques for sediment monitoring

5.2.1 Guidance on the interpretation of trend monitoring data, taking into account sediment dynamics, as an annex to the Sediment Monitoring Guidelines

T. Nunes reported that this topic had been considered in the Marine Habitat Sub-group, which had decided that the material needed further work and should not be considered for the report at the present time.

5.2.2 National sediment quality criteria values and how they are derived

T. Nunes presented a section for the draft report based on material from WGMS, including an annex on sediment quality criteria.

The ACME discussed this material, made several amendments, and accepted the material for the report, including the annex on sediment quality criteria, which contains an inventory of national criteria and standards for dredged material disposal.

5.2.3 National procedures for temporal trend monitoring of contaminants in sediments

K. Cooreman presented a draft section for the report based on material from WGMS, including an annex on national temporal trend monitoring programmes.

In discussing this material, it was pointed out that some of the inventory was not correct, e.g., that POPs should be included for Belgium, and that some of the presentation is confusing. It was particularly felt that the inventory of data submitted to ICES was not clear enough with regard to the contaminants included and the years for which data have been submitted. It was agreed that the Secretariat will amend the inventory contained in the table to ensure that the material is correct and presented in a clear manner. Based on this decision, the ACME agreed to include the text and annex in the report, with a recommendation that OSPAR and HELCOM consider this material in their trend assessments of contaminants in sediments.

The ACME also recommended that Member Countries submit data sets on contaminants in marine sediments to the ICES Marine Data Centre, for use in the 2004 temporal trend assessment of contaminants in sediments by OSPAR.

5.2.4 Other sediment issues

T. Nunes presented material from the WGMS report. In reviewing this, the ACME decided that none of this material should be included in its report.

The ACME noted the progress of research work on contaminant uptake by organisms related to sediments, in particular the work in Canada on the uptake and trophic transfer of metals in large benthic predators. This research includes laboratory measurements of pharmacokinetic parameters of uptake, distribution and elimination of single dietary doses of radiolabelled metals and organometals, using techniques such as *in vivo* gamma-counting and whole-body autoradiography.

5.3 Statistical aspects of monitoring

5.3.1 Relevant statistical issues

This item was merged with agenda item 7.

5.4 Guidelines for integrated chemical and biological effects monitoring

R. Law presented a draft section for the report based on material from WGBEC.

The ACME agreed to include this section in its report, with some amendment, and accepted that the best way to bring this issue forward is to hold a workshop. Terms of reference for this workshop should be developed under agenda item 19.2.

5.5 Preferred matrix for monitoring priority compounds under the Water Framework Directive

R. Law presented a draft section for the report based on material from MCWG. This section was accepted for the report, with amendment.

When developing the terms of reference for MCWG, ICES should ensure that an agenda item is added to the MCWG agenda for 2004 and subsequent meetings requiring them to take account of developments within the work of the AMPS Group, to assess its relevance to ICES/OSPAR/HELCOM, and make recommendations as necessary. The ACME agreed that the liaison between the AMPS group and MCWG at working scientist level should continue, especially given that the monitoring scheme developed under the WFD is likely to have a growing influence on other related monitoring programmes.

6 QUALITY ASSURANCE PROCEDURES AND INTERCOMPARISON EXERCISES

6.1 Quality assurance of biological measurements in the Baltic Sea

A. Yurkovskis presented a draft section for the report based on material from SGQAB. This section was accepted with minor amendment.

6.2 Quality assurance of biological measurements in the Northeast Atlantic

A. Bodoy presented a draft section for the report based on material from SGQAE.

It was pointed out that SGQAE has been co-sponsored by OSPAR and ICES since it was established, however, for financial reasons OSPAR dropped its support during 2003. SGQAE considered the ways in which it could contribute to the implementation of the OSPAR JAMP activities and this should be reflected in this section of the ACME report. With this addition and some changes to the recommendations, this section was adopted.

Based on this text, the ACME recommended that the ICES Marine Data Centre develop a database that will accept metadata on geographical coordinates, including projection and geodatum that was used when collecting data. Such metadata are vital when comparing locations between surveys.

The ACME also recommended that relevant ICES working groups (e.g., BEWG, WGPE, WGZE) consider the practical application of criteria for determining the acceptability of biological sampling and analytical practices, and report back to SGQAE/SGQAB. Finally, the ACME recommended that standard taxonomic checklists, including associated ITIS codes, should be generated for the Baltic Sea and the Northeast Atlantic area, and maintained on a regular basis.

6.3 Quality assurance procedures for biological effects techniques, including fish diseases

C. Moffat presented a draft section for the report based on material from WGBEC and WGPDMO. This was accepted with some amendments to the recommendations.

In the discussion of this item, it was pointed out that there is expertise in other ICES working groups on benthic community analysis and that this expertise should be utilized in the BEQUALM work on QA of benthic community measurements.

6.4 Quality assurance of chemical measurements in the Baltic Sea

E. Andrulewicz presented a draft section for the report based on material from SGQAC. This was accepted by ACME for its report.

6.5 Developments within QUASIMEME

A draft section for the report prepared by J. Olafsson based on material from MCWG was reviewed and accepted by ACME with minor amendment.

6.6 Standardized presentation of the long-term performance of a laboratory

A draft section for the report prepared by J. Olafsson based on material from MCWG was reviewed and accepted by ACME with minor amendment.

6.7 Other issues or activities

There were no issues under this item.

7 ASSESSMENT METHODOLOGIES AND RESULTS

7.1 Review and amend, as necessary, procedures for conducting temporal trend assessments of data on contaminants in biota and sediments, including procedures relevant to the quality control of such data

A. Bignert presented a draft section for the report based on material from WGSAEM, including one annex. Some of this material overlapped with material prepared for agenda item 11.1 and it was proposed that this material should be deleted here.

In the discussion, it was pointed out that the phrase "precautionary approach" will mean different things to people with different backgrounds. It was agreed that new text should be prepared to avoid this difficulty, after which the text can be accepted.

7.2 Advice on smoothers for use in the trend analysis of monthly and quarterly data on inputs of nutrients and contaminants to the marine environment

A. Bignert presented a draft section for the report based on material from WGSAEM, including one annex. The section and annex were accepted for the body of the report.

7.3 Advice on statistical aspects in relation to the development of environmental indicators and classifications

A. Bignert presented a draft section for the report based on material from WGSAEM. This contained material relevant to both the EEA indicator fact sheets and the Water Framework Directive classification scheme. Owing to the new structure being tested for this report, there was some confusion in the structure of this section and it was agreed that in the editing there should be a rearrangement of the material. The first recommendation should also be rewritten to clarify to whom the recommendation is being made and to extend the coverage of the recommendation. This section was accepted with these changes.

7.4 Methodology for joint assessments of input data and data on contaminants in biota and sediments

A. Bignert presented a draft section for the report based on material from WGSAEM. This was accepted by ACME with minor amendment.

7.5 ICES Environmental Status Report

7.5.1 Oceanographic conditions

H. Loeng presented a section for the report based on material from WGOH and the Annual Ocean Climate Status Report. This was accepted by ACME for the report.

7.5.2 Zooplankton and phytoplankton monitoring results

A. Bodoy presented a section for the report based on material from WGPE and WGZE. This was the first such contribution by WGPE.

The ACME recommended that the phytoplankton status report be prepared in a more synthetic way, by concentrating on the main taxonomic groups, with special attention to potentially toxic phyla (e.g., dinoflagellates). Indicators of abundance and biomass (chlorophyll *a*) would be valuable. It was suggested that a graphical presentation should be used, in the same way as in the zooplankton status report. When this has been done, the name of the Zooplankton Status Report should be changed to Plankton Status Report.

The ACME also requested WGPE and WGZE to summarize the status of plankton for each area, so that a better and more comparable overview can be obtained.

7.5.3 Harmful algal blooms

A. Bodoy presented a section for the report based on material from WGHABD.

7.5.4 Fish disease prevalence

T. Lang presented a section for the report based on material from WGPDMO. He stated that the disease status report on the ICES website has not been updated because there have not been enough new data submitted to the ICES Marine Data Centre to permit a new statistical analysis.

8 MARINE CONTAMINANTS

8.1 Information on specific contaminants

8.1.1 Information on the availability of suitable analytical methods to allow the determination of environmental concentrations or the effects of substances listed on the OSPAR list of chemicals for priority action, and whether any information exists on the presence of these chemicals in the marine environment

R. Law presented a section for the report based on material from MCWG and WGBEC. He noted that this was a very broad request and MCWG had difficulty covering the entire subject matter.

The ACME agreed to updated information on the status of analytical methods and of methods for determining the biological effects of the substances on the OSPAR list on samples collected in the field. The ACME recommended that OSPAR take this information into account in the implementation of the JAMP and the formulation of guidelines.

It was agreed that the tables should be part of the body of the ACME report and that references from Dioxin 2003 and from the special issue of Environment International on brominated flame retardants, which will be published in June 2003, should be added later so that they are included in the published version of the ACME report.

8.1.2 Tris(4-chlorophenyl)methanol (TCPM) and tris(4-chlorophenyl)methane (TCPMe)

R. Law presented a draft section for the report based on material from MCWG. As there was no material related to advice in this section, the ACME decided not to include this material in its report. However, the ACME noted that the collaborative research programme by MCWG members on the distribution of these compounds in fish will provide useful results.

8.1.3 Polybrominated diphenylethers (PBDEs)

R. Law presented a section for the report based on material from MCWG. He noted that the situation with these compounds is such that, when the EU announced that it planned to regulate the penta-mix of PBDEs, the manufacturers ceased their production and changed to several other compounds. This has resulted in the first indications of a decrease of the penta-BDEs in the environment in Europe, while the concentrations of these chemicals continue to increase in North America and are undergoing long-range transport to the Arctic.

In reviewing the recommendation, it was questioned why the monitoring of PBDEs was recommended for OSPAR only and not HELCOM. The ACME agreed to recommend the inclusion of these compounds in the monitoring programmes of both Commissions.

8.1.4 Toxaphene

R. Law presented a draft section for the report based on material from MCWG. As there was no material related to advice in this section, the ACME decided not to include this material in its report. However, the ACME noted that several studies are under way, particularly in Canada and under AMAP, to determine the distribution and trends of toxaphene in marine organisms.

8.1.5 Phenylurea herbicides

R. Law presented a draft section and annex for the report based on material from MCWG.

It was agreed that the recommendations and advice paragraph should be made more specific. With this, the ACME accepted the section and annex for its report.

9 FISH DISEASES AND RELATED ISSUES

9.1 Results of national reports and analyses of data on disease prevalence in wild fish stocks

T. Lang presented a section for the report based on material from WGPDMO.

It was commented that the summary should be strengthened. However, T. Lang pointed out that the scientific background information was already a summary of much more extensive material and that to further summarize this was difficult in relation to choosing which items should be in the summary. It was proposed that the new information could be highlighted in the summary.

K. Cooreman reported that Belgium has discontinued its fish disease monitoring programme for financial reasons. The ACME regretted this decision and noted that it needs to get a message out concerning the importance of these studies. The ACME discussed the audience for the information on fish diseases and how this information can be conveyed to ICES Delegates. It was queried whether the Chair of Consultative Committee could convey the message to the Delegates of the necessity to continue studies of fish diseases.

9.2 Causes of the M-74 syndrome in Baltic salmon and progress in the understanding of relevant environmental factors; status of Ichthyophonus in herring

T. Lang presented a section for the report based on material from WGPDMO.

The ACME felt that the summary was not sufficient to support the recommendation, but it was noted that there was very little scientific background material in the WGPDMO report additional to what is already included in this draft section. T. Lang agreed to find some further material to support the recommendation. With this addition, the ACME accepted this section.

9.3 Report on the existing strategies to assess the prevalence of shellfish diseases in parallel to fish diseases and chemical contaminant levels in environmental monitoring programmes

T. Lang presented a section and an annex for the report based on material from WGPDMO.

The ACME accepted this material for its report but, noting that the annex was quite short and that the section for the body of the report did not contain any scientific background material, agreed that the annex should be moved to the section in the body of the report.

9.4 Review and assess the impact of diseases of farmed fish on wild fish stocks

T. Lang presented a section and an annex for the report based on material from WGPDMO.

J. Doyle noted that there is a statement in the annex about the impact of mixed year classes of salmon in relation to sea lice. She stated that holding mixed year classes together in aquaculture facilities goes against the usual recommendations to prevent sea lice as well as conclusions reached in a Theme Session at the 2002 ASC. T. Lang agreed to check this statement and make any amendments needed. After discussion, it was agreed that the text should be checked with the author or other persons at the Aberdeen laboratory. This will be done as soon as possible after the ACME meeting as the author was not available immediately.

The ACME discussed whether the material in the annex should remain as an annex or should be moved to the "Scientific background" portion of the section for the body of the report. Noting that there was no material in the scientific background and that the annex was relative short, it was agreed to move the annex to the scientific background.

9.5 Assess the effectiveness of salmon farming management control methods for sea lice in ICES Member Countries

- T. Lang presented a section for the report based on material from WGPDMO.
- J. Doyle noted that there is some overlap in the information presented here with material in the 2000 ACME report, which was based on work of WGEIM. This is a result of two different working groups conducting work on the same topic. However, there is some new material concerning modelling in the current section.

10 ISSUES REGARDING INTRODUCTIONS AND TRANSFERS OF MARINE ORGANISMS

10.1 Current status of fish, shellfish, algal, and other introductions in and between ICES Member Countries

J. Doyle presented a draft section for the report based on material from WGITMO. She pointed out that WGITMO had not prepared an evaluation of the information from the national reports, so she had again prepared that herself, choosing two issues. This section was accepted for the report.

The ACME stressed that WGITMO should monitor the outcome of proposed deliberate introduction experiments and report on the outcome in due course.

10.2 Review and adopt the updated Code of Practice on Introductions and Transfers and its Appendices

J. Doyle presented a brief draft section for the report plus the final Code of Practice on the Introductions and Transfers of Marine Organisms, based on material from WGITMO. This represents the final iteration of the Code of Practice.

The ACME adopted this Code of Practice for use within ICES and agreed to include it as an annex to the ACME report. The ACME also recommended that it be translated into French and printed as a pamphlet and that the Code in both English and French be placed on the ICES website together with the appendices to the Code.

10.3 Synthesis and evaluation of current invasions, their consequences and significance

J. Doyle presented a draft section for the report based on material from WGITMO. This section was accepted with amendment.

10.4 Progress in ballast water research and management technologies

J. Doyle presented a draft section for the report based on material that she had extracted from the SGBOSV report. She pointed out that SGBOSV had not carried out the work requested of it. She also pointed out that an invitation extended by the ICES representative to the OSPAR Biodiversity Committee in January 2003 for OSPAR to co-sponsor this group was not considered and not included in the Summary Record of the meeting, so she has serious concerns as to the continued viability of SGBOSV.

It was questioned whether this section should be included in the ACME report or not. However, the ballast water issue is so important internationally that it would be strange not to give some message to the outer world about the ICES work on this topic. Accordingly, a number of editorial changes to this section were agreed, and the section was accepted for the report.

The ACME expressed its serious concern that the SGBOSV was not responding to its terms of reference. It was suggested that this Study Group be raised to a Working Group. This issue will be discussed further by ACME when it considers the terms of reference for its working groups.

The Chair reported that in a recent meeting between representatives of ICES and IOC, IOC indicated that they would like to have an influence on the annual terms of reference for SGBOSV. It was agreed that the current draft terms of reference for 2004 should be provided to IOC for review and possible amendments and/or additions.

10.5 Directory of dispersal vectors of exotic species

J. Doyle presented a brief section for the report based on material from WGITMO. This was accepted with amendment to the recommendation.

11 BENTHOS ISSUES

11.1 Results of statistical analyses of benthos community data

A. Bodoy presented a draft section for the report based on material from WGSAEM. It was noted that an extended version of this material had been presented under agenda item 7.1. This extended material was considered to be useful and the statistics were not found too difficult for inclusion in the ACME report in an annex. Thus, the ACME decided that reference should be made to this material in this section and the material should be annexed to the report.

11.2 Progress in the North Sea Benthos Survey

A. Bodoy presented a draft section for the report based on material from BEWG. This was accepted for the report.

12 NUTRIENTS, EUTROPHICATION, PLANKTON ECOLOGY

12.1 Review of HELCOM experience with respect to primary production measurements in environmental monitoring programmes

K. Kononen presented a draft section for the report based on the reports of WGPE and PGBSRP. This section was ultimately not included in the report.

The ACME noted that methods and measurement programmes of primary production are being reviewed by the WGPE through a questionnaire. A summary report of the questionnaire is expected to be finalised by the end of 2003. A new Study Group on Baltic Sea Productivity Issues (SGPROD) in support of the BSRP has been proposed to be established with emphasis on evaluation of the current system of productivity data collection and potential new automated techniques for data collection.

The ACME endorsed the work of WGPE to complete a report based on the outcome of a questionnaire concerning primary production measurements in the Baltic Sea. The ACME stressed that this report should clearly and critically evaluate the methods for measurement of primary productivity and report back to ACME on this subject in 2004. This evaluation is needed in particular to provide advice to HELCOM concerning monitoring primary production in the Baltic Sea.

12.2 Progress in understanding the dynamics of harmful algal blooms, including implementation of GEOHAB

K. Kononen presented a draft section for the report based on material from WGHABD. This section was accepted with editorial amendments.

The ACME noted that the material from the WGHABD report contained many scientific conclusions without providing any scientific justification or explanation for the statements. This report was very thin and lacking in substance, indicating a certain problem within this group.

The ACME noted that WGHABD had discussed the potential of the Integrated Taxonomic Information System (ITIS) as a common system within ICES and had found that, in its present form, ITIS is not mature for adoption by ICES.

The WGHABD proposed to organise a workshop on new and classic techniques for the determination of numerical abundance and biovolume of HAB-species, including an evaluation of the cost, time-efficiency, and intercalibration methods. In addition to ICES, IOC, GEOHAB, and the EU will be invited to co-sponsor the workshp.

The ACME endorsed the organization of this workshop on new and classical techniques for the determination of numerical abundance and biovolume of HAB species: evaluation of the cost, time-efficiency, and intercalibration methods.

The ACME noted that there were no physical oceanographers attending meetings of WGHABD. It was acknowledged that this problem has occurred for several years, so the ACME proposed that WGHABD make contact with the Oceanography Committee to try to gain the participation of physical oceanographers again in this group.

12.3 Review reports from OSPAR concerning the eutrophication status of the OSPAR area

A. Yurkovskis presented a draft section based on material from WGPE.

After considerable discussion, the ACME decided not to accept this section for the report. The ACME noted the necessity of providing clear, scientifically grounded advice on methods to assess eutrophication status. The methods should be able to provide a clear interpretation of eutrophication status. In relation to the WGPE recommendation that certain phytoplankton species be monitored as indicators of eutrophication, the ACME emphasized the importance of obtaining a full, scientifically justified, report on this issue. The ACME noted that, over the past few years, WGPE has not provided adequate material on this issue in its report.

13 MARICULTURE ISSUES

- 13.1 Review a discussion summary of the MARAQUA report with a view to assessing the implications of the Water Framework Directive (WFD) in EU member states on the sustainability of mariculture in coastal and transitional waters
- T. Sephton presented a section for the report and an annex based on material from WGEIM. The recommendation is for WGEIM to serve as a watchdog in relation to the implementation of the Water Framework Directive in terms of its implications for aquaculture.

It was felt to be useful to note in the ACME report that ICES has a working group that is reviewing the implications of the WFD in relation to aquaculture and stressing the value of this work. Given that no request has been made for advice on this topic, it could be more useful to have conclusions rather that recommendations and advice on this topic.

The ACME adopted this section, with some amendment, and the annex for its report.

- 13.2 Review the potential impacts of escaped non-salmonid candidates for aquaculture on localized native stocks to develop risk assessment and management strategies
- T. Sephton presented a section of the report based on material from WGEIM. This was accepted for the report after amendment of the recommendations.
- 13.3 Strategy to protect aquaculture against the harmful effects of external influences (e.g., contaminants, habitat alterations) arising from other resource users and their environmental impacts, with the aim of developing new tools to prevent or mitigate negative interactions
- T. Sephton presented material based on WGEIM, which he recommended should not be included in the report. This was accepted.
- 14 EFFECTS OF EXTRACTION OF MARINE SAND AND GRAVEL ON MARINE ECOSYSTEMS, INCLUDING EXTENT OF EXTRACTIONS AND IMPACTS ON BIOTA

C. Lima presented a brief section for the report based on material from WGEXT.

It was noted that, as of this year, ICES will be collecting data on sand and gravel extraction in the Northeast Atlantic for the OSPAR Commission, based on the fact that ICES has been collecting these data for many years, has an expert group that evaluates the data, and, consequently, OSPAR decided that it did not wish to duplicate this activity.

The ACME reviewed some text forwarded from ACFM concerning a specific proposal for the extraction of gravel. It was noted that the precautionary principle was incorrectly quoted, as it should be invoked when there is a probability of activities causing serious or irreversible harm; it is not necessary to prove such harm. Some mention should also be made of the biological effects of this gravel extraction. With these changes, this text will be returned to ACFM for its further consideration.

14.1 Current marine extraction activities and results of assessment of their environmental effects

In the discussion of the table in the draft section of the report, questions were raised concerning the columns headed "EIA initiated", etc. It was not clear what was meant by these columns, nor of what use they were to readers of this table. The meaning of these columns should be clarified to the extent possible. It was proposed that these four columns be removed as information on the meaning of these columns is not contained in the WGEXT report. There also appeared to be contradictory information in these columns, e.g., when there is a "no" under EIA initiated but a "yes" under EIA ongoing.

Based on this text, the ACME recommended that further development of the approach to Strategic Environmental Assessment (SEA) in the context of marine sediment extraction should be carried out. WGEXT should be asked to further develop this issue.

14.2 Review feedback on the use of the new ICES Guidelines for the Management of Marine Sediment Extraction, and consider whether further specific guidance is required in special cases of extraction activities where unusual environmental conditions prevail

The ACME adopted these revised Guidelines, which had been somewhat modified to include some additional ecosystem considerations, based on comments from OSPAR on the 2002 version of the guidelines.

14.3 Application of risk assessment methods as a tool for management of marine extraction activities

Based on the text for this issue, it was felt that ACME should make a recommendation concerning the development and application of risk assessment methods, as this section did not provide proposals for a follow-up on what should be done. It was pointed out that WGEXT has developed a plan for how this should be taken further. The ACME agreed that some mention of this should be made in this section of the report.

15 REVIEW OF POTENTIAL ICES CONTRIBUTIONS ON THE IMPLEMENTATION TABLE OF THE OSPAR JOINT ASSESSMENT AND MONITORING PROGRAMME (JAMP)

It was pointed out that the codes for the various JAMP activities have now changed on the basis of the revisions made to the JAMP at the meeting of the OSPAR Environmental Assessment and Monitoring Committee (ASMO) at the end of April. The numbering used in the version of the JAMP that was used by the working groups should be used at present and the renumbering can be carried out later, either by the sub-group if there is time, or by the Secretariat.

In reviewing the contributions to this implementation table that had been prepared by the working groups, it was felt that these contributions were not adequate to respond to this request from OSPAR. Most of the working groups that were given a term of reference to indicate potential contributions to the implementation of the JAMP simply indicated several issues that they were interested in working on, rather than listing the types of scientific activities required to implement each JAMP issue of concern and the activities that ICES could potentially carry out for OSPAR.

J. Rice agreed to coordinate a full ICES response on this issue intersessionally. Working with a small ACME sub-group, he developed a detailed annotation of the JAMP implementation table. Thereafter, in a plenary ACME session, he provided an overview of the approach used in preparing the extensive table on the implementation of the JAMP. This table specifies what science requirements exist to be able to carry out each of the JAMP activities, the potential ICES contribution on this activity, and any comments concerning this activity. This table now needs to be reviewed to determine whether ACME wishes to put it forward to OSPAR and, if so, what should be included in the boxes in the table. The level of specificity for each of the groups of entries needs to be standardized throughout the table.

A. Bignert stated that certain requirements must be met by OSPAR before the scientific work can be carried out, e.g., the sensitivity of statistical tests needs to be decided before a means of meeting these requirements can be devised. It was agreed that these requirements should be stated in the comments column.

In the review of the table prepared, it was considered whether the level of detail should be the same for the various components of the table. It was felt that the level of detail should relate to the amount of work already done by OSPAR on the topics, and this will vary from item to item. Thus, it was agreed that there will be different levels of detail in the various sections of the table.

The table was reviewed in detail and a number of additions and amendments were made to the entries in the table. The text associated with the table was discussed and the recommendation was amended. With these amendments, the text and table were adopted for the report.

16 DATA ISSUES

16.1 Handling of data on contaminants in marine media

J. Nørrevang Jensen presented a section for the report from the ICES Marine Data Centre. This section provided an overview of the submission of environmental data to ICES, including submissions for OSPAR and HELCOM programmes, a summary of the major data products prepared, and descriptions of future developments in the environmental databases.

The ACME agreed that a strong recommendation should be made to encourage Member Countries to submit their data to the ICES Marine Data Centre. The statement was made that the new ICES Marine Data Centre, with the new changes, will be a very powerful tool for ecosystem studies and this statement should also be made in the ACME report.

K. Cooreman stated that WGBEC conducted a review of the application of biological effects monitoring in Member Countries and noted that a lot of data are probably being produced. Many of these data may be produced by smaller institutes and they often do not have the resources to submit data using complicated reporting formats, as is the case with the ICES Environmental Reporting Formats.

16.2 Handling of nutrient data for the OSPAR Commission

H. Dooley presented text he had prepared for this item. The text for item 16.2 covers the submission of nutrients data, particularly for OSPAR. He pointed out that there are two sources of data on nutrients: oceanographic cruises and environmental monitoring studies. Often data originating from environmental sources are difficult to merge with oceanographic data owing to the depths measured and other differences in data collection. Some countries make no distinction between nutrients data that can be used for OSPAR, while other countries do make such a distinction. He also pointed out that, in addition to the poor submission of data by a number of countries, there is also a backlog problem in the data centre in handling the data submissions.

In the discussion, it was questioned why Norway was pointed out as not providing data to ICES when Norway appears to be providing more data than some other countries. In response, H. Dooley pointed out that Norway collects a large amount of data on nutrients but submits only a small portion of these data to ICES. Other countries, such as France, do not conduct much monitoring of nutrients and so have very little to provide.

In discussing whether ACME should make a recommendation that Member Countries submit their data to ICES, it was noted that this has been done for a number of years without much success. It was suggested that this recommendation be linked to the need for submission of data for a thematic assessment by OSPAR and mentioning such a deadline might be helpful in stimulating such data submissions. A key problem, however, is the lack of national policies on data submission and data availability, such that different institutes have different policies.

H. Dooley noted that he has been supplying the ACME sub-group (comprising S. Carlberg, H.R. Skjoldal, H. Loeng, and F. Colijn) with data products and other information but has not received any feedback from them. The ACME encouraged the members of this sub-group to provide timely feedback to H. Dooley on material that he supplies to them in association with the eutrophication work in relation to OSPAR.

16.3 Advice and standard data products for devloping the Common Procedure for Identification of the Eutrophication Status of the Maritime Area

H. Dooley presented text that he had prepared for this item, covering recent work on data products for OSPAR.

It was noted that further information on the most recent meeting of the OSPAR Eutrophication Committee (EUC) can be found in the 2003 Observers' Reports (Gen:2). EUC discussed the eutrophication Ecological Quality Objectives and noted that it is not clear how the five EcoQ elements can be integrated appropriately.

H. Dooley stated that the first review of the application of the OSPAR Common Procedure has been a fiasco, as countries have been able to interpret the requirements in different ways, often circumventing their responsibilities. It was pointed out that the issue of eutrophication has been solved for freshwater lakes many years ago and the principles used for fresh waters should be considered in relation to the marine environment.

It was strongly felt that ICES should make a strong statement concerning the problems with the implementation of OSPAR's objectives with respect to eutrophication, as this is an area in which ICES has considerable expertise.

Noting the observation by ACE cited above that "When several EcoQ elements can only be considered as an integrated set, there will have to be a second set of rules for how the status of the ecosystem on each EcoQ element is combined into that integrated set, to provide a single clear message on management action. These rules may prove challenging to develop" and the disharmony in progress on the COMPP, there is increasing urgency that progress be made on the rules for integrating the five EcoQ elements. Therefore, ACME recommends that a special workshop, with participation from WGPE, WGECO, BEWG, and other relevant working groups, and the ICES Secretariat, be convened in 2004, with the specific terms of reference to develop the rules and operational framework by which the status evaluations of each EcoQ element will be combined to meet the direction in Annex 3 of the Bergen Declaration that these elements be interpreted and used as "an integrated set".

16.4 Handling of biological community data

The review of this topic was included under agenda item 16.1, above.

16.5 ICES phytoplankton checklist

J. Nørrevang Jensen presented a section for the report based on material from WGPE. He reported that WGPE has expressed concern that ICES has decided to base its database on the ITIS taxonomic list as it is based on North American species. He noted, however, that there is no clear alternative to the ITIS list at the present time.

The ACME recommended that the Science Committee Chairs bring the ITIS to the attention of relevant expert group Chairs and ask the relevant ICES working groups to review the ITIS list and submit lists of species that should be included in the ITIS list to support the development of the code list for species from European waters. It was noted that experts are required to provide the appropriate information in relation to ITIS so that the correct designation can be made for the species, however, the ICES Secretariat can serve to forward the list to ITIS.

17 ORGANIZATIONAL AND PROCEDURAL ISSUES

17.1 Report of the Study Group on ACFM, ACE, ACME and Working Group Working Protocols

The Chair pointed out that ACME had been added to this group by the Delegates without this having been adequately communicated to him, so he had been unable to attend the meeting of this Study Group, owing to other commitments. The outcome of the meeting will be further considered by MCAP, the Bureau, and the Council, for implementation.

17.2 ICES Strategic Plan and Action Plans

17.3 Proposed changes to ICES publications policy

J. Rice stated that there is a new possibility for the publication of outputs from theme sessions and other activities. In terms of websites, the ICES Secretariat does not have the capacity to maintain websites for each of the working groups.

J. Pawlak stated that at the 2002 ASC, the Publications Committee discussed whether paper copies of the Advisory Committee reports will continue to be printed and, if so, whether they should be in a new series devoted exclusively to Advisory Committee reports. A questionnaire survey of readership for all the ICES publications will be conducted and further discussion of these issues will take place at the 2003 ASC.

18 WORK PROGRAMMES FOR 2004

18.1 OSPAR Commission

The draft 2004 Work Programme from the OSPAR Commission was reviewed. It was noted that the work on Ecological Quality Objectives during 2004 will include a review of the five EcoQOs on eutrophication issues and will require some interaction between ACE, which has the lead in ICES on the development of EcoQOs, and ACME, which has the expertise on eutrophication issues. Further planning will be carried out intersessionally.

18.2 Helsinki Commission

Draft requests from HELCOM for 2004 were available, and it was noted that all of the requests are repeats from 2003.

19 ANY OTHER BUSINESS

19.1 Invitation to co-sponsor an OSPAR workshop to update and extend existing OSPAR Background Reference Concentrations and Ecotoxicological Assessment Criteria, and to develop guidelines for their application

C. Moffat reported on an invitation from OSPAR to co-sponsor a workshop to evaluate and update Background Reference Concentrations (BRCs) and Ecotoxicological Assessment Criteria (EACs) and how they should be used in assessing contaminants in marine media. This workshop will be hosted by the Netherlands in The Hague in February 2004. He pointed out that EACs have come under considerable criticism, however, with the development of Environmental Quality Standards (EQS). Under the Water Framework Directive, there is a question as to whether EACs will continue to be used. If ICES co-sponsors this workshop, we will need to support the outcome.

The Chair recalled that the first workshop on BRCs, which ICES co-sponsored, did not have any participants from ICES so that ICES was quite critical of the outcome. If ICES will co-sponsor this workshop, there will need to be an ICES presence so that we feel able to influence and accept the conclusions.

Although there was some concern about the potential outcome of the workshop, the ACME felt that ICES would send the wrong signal if it were to decline to co-sponsor the workshop. Accordingly, the ACME recommended that ICES cosponsor this workshop. Noting that C. Moffat is already involved in some aspects of the planning for this workshop, the ACME asked whether it would be possible for him to represent the interests of ICES in the planning of the workshop. C. Moffat agreed to do so.

It was agreed that the announcement for this workshop would be sent to members of MCWG, WGMS, WGBEC, and WGSAEM.

19.2 Proposed ICES/OSPAR Workshop to develop guidelines for integrated biological effects and chemical monitoring

J. Pawlak provided the background for this proposed workshop, which has been proposed as the best means for developing guidelines for integrated biological effects and chemical monitoring, based on consideration of this issue by MCWG, WGMS, and WGBEC during 2003.

A small sub-group consisting of T. Lang, K. Cooreman, E. Andrulewicz (representing K. Lehtonen), R. Law, and A. Bignert will work with J. Pawlak to draft proposed terms of reference for the workshop, including identifying conveners, venue, and dates.

19.3 Thirteenth ICES Dialogue Meeting

ICES is setting up a Steering Group to plan the next Dialogue Meeting with representatives from OSPAR, HELCOM, EC DG Environment, EC DG FISH, NEAFC, IBSFC, NAFO, and NASO.

In preparation for the first meeting of the Steering Group, the invitation letter states that the Dialogue Meeting will be used to discuss and evaluate recently introduced changes in the ICES advisory process. The Chair encouraged members to provide ideas for this meeting that he can bring up at the first meeting of the Steering Group in early July.

19.4 German QSR

The General Secretary thanked ACME members for their contributions to the review of the document called the "German QSR", which was commissioned by the German government in association with the joint OSPAR/HELCOM Commissions meeting at ministerial level. This meeting will take place in the last week of June in Bremen. This document has been very well received and is an example of a new type of product that ICES can prepare for a broader audience. ACME members will receive a copy after it has been released by the German government.

19.5 Consideration of working arrangements during this meeting

The Chair thanked J. Rice for his particular assistance during the meeting, which removed some of the load from him during the meeting.

He then opened the floor for discussion on the new working arrangements this year, working in sub-groups for about one third of the meeting.

It was felt that working in sub-groups had functioned very well. However, the assignment of coordinators for topics had not worked particularly well. The role of the coordinator was not clear and it should be decided whether this should be continued next year.

It was noted that for some items a member in another sub-group should have been present for the discussion and this created some difficulties. It would be good to find a solution to this next year. This could be solved by a planned exchange period for some part of the day.

This work could be conducted with greater efficiency if the members can inform the Secretariat of which group they wish to participate in. The sub-group coordinators should also plan in advance for any needed coordination.

It was pointed out that this system gives an extra layer of review of the sections of the report, as they are first reviewed in a sub-group and amended, and thereafter reviewed in plenum and amended. This gives extra review but is less efficient. This also gives less time for updating the files. However, when the entire agenda is covered only in plenum, many people are not involved in many of the agenda items, so this is also inefficient. When it is anticipated that key decisions will be controversial, these should only be debated in plenary to avoid double debate.

It was felt that there was a much higher level of involvement using a sub-group approach. Given that this is the first year in which we are trying this approach, it was felt that the system worked reasonably well. It could be expected to work better next year.

The Chair invited members to reflect on the working procedures and send e-mails with any further thoughts. The procedure for next year's meeting will be discussed at the 2003 ACME Consultations Meeting in Tallinn.

20 ADOPTION OF THE 2003 ACME REPORT AND REVIEW OF DRAFT MINUTES

The ACME reviewed the draft 2003 report on a detailed basis and made a number of amendments to the report. It was decided that, rather than conducting a detailed review of the table under agenda item 15, members should review this table immediately after the meeting and send any comments to Louise Scharff within two weeks, i.e., by 7 July.

Draft minutes from the meeting were distributed. These should be taken together with minutes prepared by members for certain specific items. Members were requested to review the minutes to ensure that any issues that need to be raised with the Consultative Committee or the Delegates have been included, as well as any comments or requests to working groups. These additions or amendments should be sent to Louise Scharff by 7 July. Noting that the ACME sub-groups on marine habitat and on mariculture has prepared minutes of their discussions, the ACME agreed to annex these minutes to the minutes of the plenary session. These are attached as Annexes 2 and 3, respectively.

The edited ACME report will be posted by 15 July and members are requested to send their comments back by no later than 30 August. Comments on the draft minutes should be returned by the same date.

The ACME Consultations Meeting will be held in Tallinn on Monday 22 September from 9.00 to 14.00 hrs and on Tuesday 23 September from 18.00 to 20.00 hrs. The Chair noted that one task for that meeting will be to complete an audit of the Action Plan for ACME.

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ANNEX 2: MARINE HABITAT SUB-GROUP MINUTES

The Marine Habitat Sub-group had the following participants:

Jean Piuze
Jan Olaffson
Robin Law
Anders Begnert
Kris Cooreman
Colin Moffatt
Carmen Lima
Teresa Nunes
Eugene Andrulewicz

Agenda item 6.4

The SGQAC report was to have been provided to MCWG for consideration. However, Robin Law reported that due to technical problems only one Annex was available during the MCWG meeting. Intersessionally MCWG members provided comments on the other three Annexes. In all cases the comments were relatively minor.

Eugene Andrulewicz will make some final edits to the Section based on the comments received. These comments related to the organization of the material in the Advice and Recommendations section and the nature of the material that should go into the Scientific Details section. The Annexes from the SGQAC report will be included as Annexes to the ACME report.

In plenary some minor editing was identified.

Agenda item 6.5

Colin Moffat noted that the web address for the QUASIMEME site had changed. Paul Keizer is to check and correct the web address provided in the document.

This section needs to be reorganized to the new format. Under the recommendations it should read "ESTABLISHED QA protocol".

Agenda item 6.6

The figures will need to be redrafted so that differences in the shading can be distinguished in black and white.

This section needs reorganization also. The figures will be included in colour so there is no need to redraft them. The paragraph just before the table belongs in the summary. Under the recommendation – "ICES encourages the participation of chemical laboratories in member countries in QA exercises such as QUASIMEME.

Agenda item 6.7

NIST (?) is doing some work on organics in marine mammal tissue. This needs to be identified as an item for MCWG to address for next year.

Agenda item 8.1.1

The references need to be updated; Robin Law to take care of this. Also the proper titles for the CRRs and the ACME/ACMP reports are needed. The statement in "Needs for further research" requires clarification. Action – Robin Law?

From plenary – text under "advice" needs to be sharpened – ICES recommends OSPAR to take into consideration the information provided in the implementation of JAMP and formulation of the guidelines.

This can be added as a line following the existing text.

No information in the summary. The middle two paragraphs plus the first sentence of the following paragraph would make a good summary. The title on the column needs to have the word "preliminary" removed.

This item was in the 2002 report as a preliminary report and the table was included in the main part of the text. There should be a sentence added to indicate that this is an update to last year's report. Also, move annexes to tables in the text. Also the references from the Dioxin 2003 meeting should be added after the meeting in August.

Agenda item 8.1.2

TCPM and TCPMe are two organohalogens found in the environment of unknown origin. Jean Piuze will get the details from Michel Lebeuf about the Wellington Co. that has standards. There was a discussion about recommendations made by ACME last year about additions to the JAMP. Colin Moffat noted that the format of the JAMP was changing significantly and therefore these recommendations may no longer be appropriate for OSPAR. The recommendations may be more relevant to the CEMP. Robin Law and Colin Moffat are to draft an appropriate recommendation. Robin Law should add a statement regarding the change in production patterns for fire retardants and how that change is reflected in the residues found in the environment.

Possibly remove from report.

Agenda item 8.1.3

Fire retardants (PBDEs) –recommendation should be rephrased to include HELCOM.

Agenda item 8.1.4

Toxaphene – possibly remove from the report.

Agenda item 8.1.5

Phenylurea herbicides – leave in report. Possibly make more specific. ICES urges member countries to look more widely to determine the spatial extent of this potential threat. Remove the name of the author from the start of the Annex and acknowledge him as the author at the end of the annex.

Agenda item 7.1

We need to check on the organization of the section with the Environment Adviser. Done – it was agreed to make this two sections. Also need to check with her regarding the recommendation at the bottom of p. 3, just before Figure 7.1. It was agreed that this should be dealt with in the report summary.

It was also agreed that MCWG should be asked to provide "< DL" data for WGSAEM so that they can further test the suggested approach to dealing with this type of data.

Agenda item 7.2

This section needs to be revisited with respect to the summary and recommendations. The question is whether or not the methods are ready to use.

Agenda item 5.3.1

It was agreed that the draft material should not be included in the report. However it was agreed that section 4 of the WGSAEM report should be reported under agenda item 7.1.1. Also the last sentence from section 9 should go in the ACME minutes.

Agenda item 5.2.1

There was a major discussion about what should be included in this section. Apparently the OSPAR/SIME meeting, reported by Stig Carlberg was considering the use of laminated sediments for temporal trend analyses. It was therefore

agreed to include the section on the Baltic in the report. Care has to be taken to qualify the limited potential of this method.

Further clarification was received from the Environment Adviser and it was determined that this material should not be included in the ACME report until next year when it has been completed.

Agenda item 5.2.2

Again there was a long discussion about this section. It was agreed that section 9 of Annex 6 of the WGMS report contained the crucial information. It was agreed that the contents of this section would be checked against last year's ACME report and the appropriate material from or reference to this section would be included along with the detailed report in the Annex. The contents of section 9 need to be checked against the Burton paper. Teresa Nunes would take care of this with help from Kris Cooreman.

Agenda item 5.2.4

Teresa Nunes had drafted some material but it was agreed that little, or perhaps none of this, would constitute advice or recommendations. Teresa Nunes will redraft or delete this section based on a reconsideration of the material as to what might constitute advice.

The decision was made in plenary not to include any of this information in the report but the appropriate recommendations and action items should be extracted for the minutes.

From Agenda item 8.1.3

Need for further research or additional data

These compounds are persistent organohalogen compounds, which show increasing concentrations in biota in some areas and which are undergoing long-range transport to the Arctic. The MCWG will receive and report on new data next year, including data on beluga whales.

From Agenda item 8.1.5

Need for further research or additional data

Additional data on the distribution of these compounds in the marine environment will be reported to MCWG2004.

Agenda item 5.1.1

This section needs to be reorganized and the relevant material extracted from WGSAEM. Also, there needs to be specific material added regarding the transects being located along potential contaminant gradients. (Action – Kris Cooreman) From the plenary – The status of the OSPAR request needs to be confirmed. The Environment Adviser is to check this and edit accordingly. More material from BECPELAG needs to be added to support the summary. Thomas Lang and Kris Cooreman are to work on this. Under "recommendations", specifically ICES recommends that member countries use the outcomes from the BECPELAG for EEM monitoring for the oil and gas industry.

The BECPELAG overview by W. Wosniok in the Annex should be converted to point form in a text file for inclusion as an Annex.

Agenda item 5.1.2

The reference in the title should be to "fish" diseases. Most of the draft material should be moved to the minutes. The revised criteria should be included in Section 5.1.3. Also note the recommendation from WGPDMO. There are problems with the "intercalibration" column in Tables 7.1.a and b.

Agenda item 5.1.3

Do not include this material in the report but pass along information to WGBEC that Tables 7.1.a and b need to identify the QA method more clearly. As is, the "other" category is not useful. Also the QA information should reflect the OSPAR Category I and II designations. Also WGBEC should reconsider whether or not to include "shell thickening": apparently OSPAR is considering removing it from their list. In plenary it was decided that it would be timely to include Tables 7.1.a and b. Kris Cooreman and Thomas Lang would work together to rectify the problems identified in the tables. Information from agenda item 6.3 can be used to update the tables. Also note that "promising" should be removed from the title since only the "recommended" methods are to be included in the report.

Agenda item 5.1.4

This section should be written to include the information on TIE. The reference for the EPA guidelines needs to be found.

EPA 1992. Marine Toxicity Identification (TIE): Phase I Guidance Document. EPA 600/R-96-054, September 1996. Available at www.epa.gov/cgi-bin/claritgw

Note numerous specific editing comments in the sub-group Chair's copy of the draft text. The "recommendations" section should be changed to read:

"TIE is an important and promising strategy for the integration of biological and chemical methods in monitoring as a problem-solving tool. There is need for quality assurance/quality control (QA/QC) procedures for TIE techniques if they are to be used for regulatory purposes, possibly in the form of reference materials provided through BEQUALM. The ACME recommends the application of TIE techniques to **relevant** environmental problems to gain more experience regarding its wider applicability."

We need to define what "relevant" means.

Agenda item 6.3

The WGBEC recommendations need to go in the minutes.

Agenda item 5.2.1

There is no external advice in the draft material. There is internal advice regarding the need for more country input and the need to include an analysis of methods used for trend monitoring in the final report. The status of the report needs to be communicated to the clients.

Agenda item 5.2.2

This material should be included but requires major revision. Action – Kris Cooreman and Teresa Nunes. Teresa Nunes provided some revised material during the plenary.

Agenda item 5.2.3

The Annex should be included. Teresa Nunes is to take care of this. The advice for WGMS needs to be extracted to the minutes. Note that the title in the draft report is not correct. The secretariat will make corrections to the Table A7.3 (WGMS report) that is in the Annex to be included in the report.

Agenda item 5.4

This includes material that is relevant to agenda item 19.2 and it includes the material that was in the original draft of agenda item 5.1.4. In plenary it was noted the recommendations should start with – "ACME concludes that a workshop would be the best means to". The last paragraph of the draft section that begins with "The ACME also recommends ..." should be suggested as a TOR for the workshop. This will be covered under Agenda item 19.2 as a business item.

Agenda item 5.5

It was noted by Colin Moffat that the Water Framework Directive applies to coastal waters and not to most marine waters. In plenary it was noted that this draft needs to be edited so that it is not so "business-like", i.e., remove name references, etc. It was noted that AMPS has limited experience in marine waters so the collaboration with MCWG was welcomed. There was some question about a group being set up under ASMO (or EU) that may also be relevant here.

ANNEX 3: MARICULTURE SUB-GROUP MINUTES

- It was agreed that all drafts of the report (agenda items 9, 10 and 13) should be reviewed thoroughly prior to general distribution to ACME.
- It was agreed that the specific terms of reference should be reviewed for all WGs and SGs reporting to MARC with responsibilities for supplying advice to ACME. It is imperative that specific products be identified (in plain, simple terms) that are then used by ACME to make informed decisions. These explicit directions will provide guidance to the summaries, conclusions and recommendations required of their deliberations.
- It was agreed that MARC, in conjunction with ACME, should interact with all WG Chairs so that they are informed of the necessity of providing fully documented concise summary statements on all requests for advice from both Advisory and Science Committees. Agenda time must be set aside to complete those tasks within the meeting (or by correspondence) and fully discussed in WG plenary prior to terminating the meeting. Further, draft WG reports must be produced and available to all participants prior to the meeting's conclusion.
- It was agreed that MARC will work directly with the WGEIM and explain that further formal reporting on work revolving around issues concerning the ICZM and mariculture should be suspended until such time as the final report is available from the Study Group for the Information Needs for Coastal Zone Management (SGINC). The report will define the boundaries within which ICES will provide scientific advice into the coastal zone management decision-making framework. The WGEIM has discussed this topic for many years and has acquired substantial experience. They are requested to provide a participant at the next SGINC meeting.
- It was agreed that the MARC will work with ACME to review the merits of incorporating the ToR of the SGBOSV into the WGITMO or elevate its status to a full WG. Substantial hurdles have been encountered by the SG in achieving its goals and they have not been able to bring closure to outstanding issues within a reasonable timeframe. The international significance, relevance and exposure of the issues make it difficult to conclude SGBOSV business during the limited time available during meetings. Other vehicles and venues may be available for the international participants to meet on a regular basis to exchange information.
- It was agreed that substantial information could be brought to the table by MARC WGs in response to the JAMP exercise. This could lead to the development of codes of practice for both industry and regulatory bodies.

10.1 Current status of fish, shellfish, algal, and other introductions in and between ICES Member Countries

The ACME recommends that WGITMO monitor the outcome of proposed deliberate introduction experiments and report on the outcome in due course.

10.3 Synthesis and evaluation of current accidental invasions, their consequences and significance

WGITMO is requested to provide advice as a matter of urgency on any further remedial measures to contain existing accidental introductions.

10.4 Progress in ballast water research and management technologies

The ACME reviewed the ToR of SGBOSV with a view to focusing on the priority issues to be addressed. The ACME notes with concern the slow progress being made in this area and also the status of the IMO Ballast Water Convention and proposed draft ballast water treatment standards contained in the draft Convention.

It was made clear that finalization of these standards is vital so as to provide the R&D community with a clear benchmark to aim for in developing alternative treatment technologies. It was also made clear that organism concentration values currently inserted in the draft standard are subject to negotiation. Expert scientific input is urgently required in order to inform this process and ensure that scientifically defensible and environmentally meaningful values are adopted in the Convention and such advice and input is required in time for consideration by MEPC 49 in July 2003.

13.1 Review a discussion summary of the MARAQUA report with a view to assessing the implications of the Water Framework Directive (WFD) in EU member states on the sustainability of mariculture in coastal and transitional waters

It is recommended that WGEIM continue to monitor the progress of the implementation of the WFD and actions under the Commission policy for Sustainable Aquaculture, with a view to updating this review and advice to ACME.

13.2 Review the potential impacts of escaped non-salmonid candidates for aquaculture on localized native stocks to develop risk assessment and management strategies

It is recommended that a workshop be convened with ICES Member Countries to review the overall experience with escaped non-salmonids. This could include a session on the development of simple cost-effective tools to discriminate wild from cultured organisms. The completion of work associated with this term of reference is anticipated to span the next two years.