DRAFT

MINUTES OF THE

Advisory Committee on Fishery Management

Højstrupgård, Helsingør 22–31 May 2001

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International Council for the Exploration of the Sea

Conseil International pour l'Exploration de la Mer

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MINUTES

1 PLENARY SESSION 22 MAY

1.1 Ad. 1 Opening 9:00

The Chair welcomed the participants. The Russian member was missing and there was no information about when he could be expected. Colin Bannister was expected later on Monday. Both arrived during the afternoon. The Chair especially welcomed new participants, Carl O'Brien, Thomas Gröhsler, George Kornilovs, Robert Aps, and as EU Observer, Ken Patterson.

The ICES General Secretary participated in the opening and welcomed on behalf of the Secretariat, the committee. He informed in details about the (lack of) reconstruction of the Secretariat and he informed the Committee, that he has now decided to recommend to the Bureau that due to technical difficulties in the building process, the reconstruction should be given up. One possibility now is to find a completely new place in Copenhagen for the ICES Secretariat.

Practicalities of the current meeting were discussed explained.

The Chair stated that he will aim to end at 18:00 each day, and try hard to avoid long working days which often are not very productive any way.

1.2 Ad 2. Adoption of agenda and timetable

The Agenda was adopted with some minor changes and a new revised agenda was circulated (see Appendix I).

1.3 Ad. 3a. Approval of Minutes and Technical Minutes from the October 2000 ACFM meeting and the April 2001 ACFM NASCO Sub-group meeting

Minutes. It was agreed to take out the following text under Ad 14e), 4th paragraph, "but maybe the expertise level at the LRC might not have been as good as wanted".

Ad Salmon Minutes. The WGNAS wants back the one meeting day, which the working group was cut back this year, but the argument is not given in the Minutes. There were some doubts about whether the working group had been properly involved and informed in the decision last year of cutting the number of days back. It is important to communicate with the working group this year about next meeting's TOR and the number of days for the meeting.

The PA for salmon will be discussed in connection with the SGPA report (see below) and there will be a theme session at the ASC about salmon and PA. Input from this will be important to consider, when determining the TOR for a possible future meeting of the SGPA.

1.4 Ad.4. Documentation and Requests for Advice

The Chair reminded the committee that it should make sure that all requests are answered when doing the summaries during the rest of the week.

1.5 Ad 5. MCAP

The ACFM Chair and the Vice-Chair informed about the MCAP meeting this winter. Regarding the procedure within ICES of dealing with requests from the clients, the professional advisers shall first screen these and only problematic requests will be dealt with by MCAP. MCAP is new and has only had one meeting yet. MCAPs precise role in the ICES system will develop over time.

The MCAP meeting was influenced by a recent criticism to ICES from some clients in EU and from a letter from Joe Horwood.

The EU Observer raised the issue about how ICES responds to criticism by clients. This is done for instance via the WGCOOP, at dialogue meetings every about 3 years, and at informal meeting between clients and ICES. The EU Observer mentioned that maybe this system is not working effectively, as there were some examples of lack of respond.

It was also mentioned that it is important for ACFM members to know the ICES responds to clients, and that they should be documented somehow.

The WGCOOP report contains several points of critique of ACFM:

- Why can working group reports not be made available to clients immediately after the end of the working
 group meetings? This is however conflicting with the demand for quality control and peer review of the work
 so a correct balance will need to be found.
- Timelines. ICES has this year changed things and meeting dates quite a lot and it seems prudent to wait with new changes in timing until we have gather experience with the new time schedule. One experience, which already seems clear is that ICES has probably pushed the issue to the limit. There is very little time to review working group reports and some very important surveys are not coming in until well within working group meetings (some even after and it will be interesting to see whether managers will ask ICES for updates of assessment when new survey data are available). It should be noted to clients that a further pressing of the system, would significantly decrease the quality.
- Consistencies. The SGPA report deals to a large extent with this and is discussed below.
- Uncertainties in advice. There is an inherent conflict in the PA concept and in annual consideration of uncertainty, because the PA concept implicitly assumes that the uncertainty is the same in all years. There was some discussion about the various aspects of the PA concepts like technical precision, quality differences between PA values by stock, whether it is only necessary to consider uncertainty in current state of the stock and not in the PA points as these might be considered as more or less arbitrary choices, etc. Maybe it would be an MCAP responsibility to sort this out and it might be a benefit for ICES that this is done by a committee independent of ACFM. It is very important to sort out which part of the uncertainty in the assessment that is covered by the PA concept. For instance uncertainties in major changes in the ecosystem, like climatic changes or changes in frequencies in inFlows to the Baltic, are generally not covered by the way ACFM use uncertainty at present. To sort these things out seems to be important before MCAP is getting involved too much in concrete work on this. Scientists confidence in fish stock advice varies by stock and this is important for managers to know and this might not at the moment be properly reflected in the advice and the PA procedures; "gut" feeling by scientists should somehow be communicated to the managers. This is, however, difficult when at the same time striving to be clear, transparent and consistent in the advice. Dialog with managers seems to be the way forward on this issue. It is important to be consistent and if there are deviations this should be clearly explained. Inconsistencies that are not well justified should be avoided.
- Safe Biological Limit. Some has misunderstood this term. In the EC Green Paper the term is used repeatedly and the meaning is well understood at least by EC. It should be stated clearly in the introduction to the ACFM report what the term means. Maybe fishing mortality should not be connected with the term Safe Biological Limit, because if the stock is sufficient large even an F above \mathbf{F}_{pa} can be claimed to be biological safe in the short term if it is not bringing the stock below \mathbf{B}_{pa} .
- MCAP also was concerned over the increasing problem with lack of scientists with the needed expertise for the assessment work. The individual institutes should consider how to improve the situation. ACFM members should try to promote at the national laboratory level that the situation improves.

Joe Horwood's letter

The letter from Steffen Smidt, EC, stating that ICES text about reduce F "as much as possible" "...should be accompanied with an account of associated consequences, again from a purely biological and /or factual point of view" and if "...from a biological point of view and for the fish stock concerned, the fishing mortality rate should be zero, the Commission has no objection to ICES making that statement." is to some extent in conflict with JH's comment regarding haddock and other gadoids in the North Sea. JH's would like ACFM to reconsider the effort reduction it advised for North Sea gadoids in the 1990s. A part of the problem is that ACFM and assessment working groups do not have technical interaction information available. Managers have as Steffen Smidt above, indicated that they want a biological evaluation where not too many technical and especially socio-economical aspects are taken into account.

The EU Observer said that for haddock the advise in fact recommended to choose an option with lower catch than corresponding to some of the un-shaded options. It was suggested that the PA reference points could be set taking into

account species and technical interaction. It was in this connection mentioned that, generally, it is a problem for managers to deal with the qualifying text in the advice.

A possible solution to this problem might be that further work, conducted outside the ordinary ACFM meetings, are needed on the management advice when a problem is spotted by the ordinary advisory process, as was done this winter for the cod in the North Sea. One question in this connection is whether this should be done within the ICES system or in some other forum. The process necessarily mean that this will have to be done in two steps because the managers need first to agreed with ICES, whether for a given stock a major management action is needed.

It is a challenge for ACFM to state the often-important part of the advice, which cannot be quantified, in a way, which will make managers take action.

If ICES is going to base its advice on catch by area and gear, more resources and time much be given to WGS. This will need a radical change compared to what we have today. It is doubtful whether this is best performed within the ICES system or rather should be linked to the management/industry system. Whether this is a waist of scientific effort due to the large uncertainty in the basic catch data – whether we are aiming at a high precision on part of the data, but not improving the overall precision, is an important issue to consider as well.

Maybe some simple approaches like a 50% mixture of haddock and cod fishery might be better than either assuming that the two fisheries are totally independent or 100% mixed.

Where mixed fishery is important, there has been an inconsistency in the past between advising closure for some stocks and not for others.

It was also suggested that due to the large uncertainty with by catch and discards, it is not realistic for ICES to try to sort out 2^{nd} or 3^{rd} order problems like catch by area and gear. Furthermore, the industry and management should have better control over data and information and ways of dealing with mixed fisheries, than ICES.

In some areas like the North Sea ICES often comment upon mixed fisheries, but for other areas where it is also relevant as for instance for the Irish Sea, ICES have not done this in the past.

It was agreed that at least an advice based on a pure biological basis should be given, and if there are technical interactions this should be stated in qualitative terms. ACFM should try to be helpful in stating what data and analysis are needed about the technical interactions for a sound management decision.

It was also agreed to start a process leading to improved possibility for ICES to deal with mixed fisheries, by considering what structural frame is needed for compiling relevant fleet data. This should be done in dialog with the managers and the industry. The basic data exist, but it is a large work to compile and analyse it and it might be better dealt with outside the ICES system, where it is easier to have several annual meetings, *ad hoc* meetings etc. in task groups.

Possible over-estimation of the North Sea cod TACs:

It is becoming increasing apparent that there might be a general retrospective pattern of ICES assessments being over optimistic.

Frans van Beek presented a table, which showed that ICES had been overestimating the NEA cod stock for the recent at least 5 years. The stock has been overestimated by between 35% and 158%!!

Also for North Sea herring, North Sea cod and the two Baltic cod stocks this phenomenon is apparent for the recent about 5 years.

The reason for this is unknown at the moment. Several reasons have been suggested like method problems, increasing rate of discards, increasing rates of mis-reporting etc. There is at the moment no consensus of the reasons. It is of course very important to find out what the reasons for the bias are.

For the time being it might be appropriated to avoid giving TAC advice. Effort regulation have been advised for the North Sea cod, whiting and haddock at least in the past for some years. The results of this advice are, however, not very encouraging. Furthermore, for pelagic stocks effort is not very clearly related to F and thus effort regulation is not an

option. Furthermore, if there is a bias in the assessment there is both a bias in F and in SSB, so to advise an effort level based on F is also potential biased.

TACs are not related directly to catch, but to landings, and this fact can be regarded as a part of the problem.

It was suggested to include a column in the forecast table with bias corrected catches. However, managers do usually not like more than one advice although they seem to have learned to live with it for North Sea herring.

Semi-artificial bias corrections, i.e. corrections of the VPA or of the catch forecast based on past experience of bias percentage, are undermining the credibility of ICES. It furthermore makes the approach less transparent.

The conclusion was that ACFM carry on as usual, but clearly state in the text the bias problem for those stocks where it is relevant, and commit ACFM and the assessment working groups to really find out what the reasons are for the bias.

The mid-year problem:

 \mathbf{F}_{sq} vs. Ftac. This was discussed in October 2000 and no new views points were presented.

1.6 Ad 6. WGCoop report

Hans Lassen presented the report.

The main work of the WGCOOP has moved from financial issues to more advisory ones.

The report make the point that instead of using stocks as the main unit for the assessment ICES should use fleets.

The errors made by ICES regarding the Anchovy advice for 1999 and the advice for cod in the North Sea for 1995-2000 was discussed.

Regarding PA ICES should reconsider how this is best implemented for short lived species like sprat, capelin, anchovy and the like. Regarding the HCR these have been contracted out and when EC receives the reports ICES will be invited or requested to deal with them.

Regarding HCR the EU Observer informed ACFM that the idea of them supporting or contracting out the work on HCR and not an idea of ICES should not work on it but rather that EU wanted to support the work.

The postulate from Alain Laurec, that managers have followed the ICES advice closely on North Sea cod was questioned, as ICES has several times said that TAC is not a good system for the management of the North Sea cod stock.

An analysis of what went wrong with the cod assessment is needed because ICES need to have a clear answer to that question. It might be a task of the Methods Working Group. However, the issue is more broad than just technical, as apparently the managers have mis-understood the ICES advice and only focused on the TAC value and not other part of the advice, which stated among other things that TAC was not an appropriate management tool. This part of the problem seems to be a task for MCAP to deal with.

It was agreed that there is a need for a special study group. It was agreed that ACFM should take the initiative to set up a group, which can deal with both the technical aspect and the management aspect of the cod issue. A small sub group of acfm will draft a short note, about what ACFM should do regarding the TORs for such a group.

1.7 Ad 7. SGPA report

Colin Bannister presented the report.

ICES seems to be a front runner in implementing the PA compared to other ICES-like organisations like NAFO and ICCAT. ICES have achieved a lot already. Both EU, Norway and IBSFC have implemented some of the PA points in the management.

MSY are sensitive to S-R relationships and the estimation of these. However, the ICES medium-term projections are also influenced by these uncertainties. It was suggested that MSY should not be categorically rejected as an element in the PA procedures. EC has requested that ICES include in the advice something about the target F and SSB, and MSY will be relevant in this context. The actual PA ref. points used for some ICES stocks are in fact not that far from MSY points in its justification.

The EU Observer suggested that a full list of F and B reference points could be presented in the summaries, and ICES might explain why it has chosen the particular PA reference points.

The template (Table 5 on page 17 in the report) for reaching the advice was discussed. It was stated that the key was surprisingly precise in reaching the actual advice for test cases from the 1999 ACFM advice.

It was agreed that it was appropriate to start using the key during the present meeting, because it might secure a higher degree of consistency in the advice. The template is too rigid to be taken uncritically. It must not be a "jail house" which we need very good excuses to escape.

The advice key should only be given as an internal document, and not included in the text about the ICES form of advice in the ACFM report. When experience are obtained from its use this year and when we are more sure that it works satisfactorily, it can say next year be included.

It was stated that it might be time for ACFM to start coming up with target reference points, so that we can move away from the dangerous levels of F and SSB and it would then be possible to include the point of maximizing the yield in the advice.

It was disappointing that USA and Canada were only represented by one member and Scandinavia by a few. Part of problem was that the meeting dates were changed at a late state and that the financial situation for USA suddenly prevented participation.

1.8 Ad 12 ACFM working protocols and Form of Advice

New layout for the stock summaries

A working document by Tore Jakobssen was discussed.

It was agreed that the maximum yield aspect should not be in the State of the Stock section, but rather in the Management Advice section. Indications of the magnitude of the gain in yield by applying \mathbf{F}_{max} etc. in fish stock management is important to give. Managers will always ask whether it is worthwhile to suffer the pain – the gain must be large enough. It will flag to managers that they are currently far away from these reasonable management targets and serve as a way of conveying the message of the current stress on the fish stocks.

However, for some stocks \mathbf{F}_{max} and $\mathbf{F}_{0.1}$ are outside the past experience of the stock dynamics and thus we do not know how the stock dynamic will be under such a management regime.

It might be appropriate to mention target here as we wish managers to set targets.

A list should be given in the stock summaries giving all the various F and B reference points available for each stock as this what managers wants.

Tore Jakobssen's paper included a suggestion for a table explaining changes in perception of the stock size. This was to some extent similar to the QCS when they included a *status quo* catch evaluation (was deleted a few years ago from the QCS). The main thing is that comments to changes in perception of the stock are given.

It was agreed to include a section in the Summaries after the section with the Management Advice, stating the reasons for changes, if any, in the perception of the stock.

The Plenary session was closed 19:15.

2 PLENARY SESSION 23 MAY

A short plenary was held with the WG Chairs present in order to inform and shortly discuss with them issues important for the work in the SUB-Groups.

The ACFM Chair welcomed the Working Group Chairs.

He outlined the tasks of the Sub-groups. The WG Chairs are responsible for the Tech. Minutes notes. As the Tech. Minutes from now on will be published together with the WG reports on the CD produced at the ASC there is a need to be clearer in the text and formulate it in a way that is understandable for people outside ACFM. The level of details in the explanations should probably be similar to the level in the WG reports.

The reviewer is responsible for the Summary and the reviewer will present the summary to the acfm plenary next week.

The Advice Key was shortly discussed and it was agreed that the "0.95" should go out. It was a kind of bagatel limit which ACFM have used in the past, but which seems an unnecessary complication, because this will anyhow be a limit, namely 0.95*the other limit, so nothing is obtained and an extra unnecessary limit point is introduced.

The issue of ACFM not using the limit points in the advice was raised again and the general feeling was that it seems strange not to use these in the advice especially in regard to recovery plans. Also at least IBSFC use limit points in its HCR.

3 PLENARY SESSION 24 MAY

The ACFM chair decided to hold a morning session of a maximum of 1 hour and preferably less to deal with items that the subgroups referred to plenum and some minor items that required an early decision.

The Thursday session was opened and the Chair informed ACFM that nomination for election of three WG chairs would take place Monday 28 May and that the elections would be done on Wednesday 30 May. He reminded ACFM that the Working Groups had proposed candidates. He also noted that Marinelle Basson (HAWG chair) would take up a new position in Australia and that it would therefore not be possible for her to continue as HAWG chair. ACFM would elect a new chair at the Consultations in September during the ASC.

The Chair reminded ACFM that EC has requested ICES to provide at least \mathbf{F}_{max} and $\mathbf{F}_{0.1}$ among the options presented.

There was a discussion on how Medium term projections should be presented. There are many methodological problems with these projections The extreme fractiles are not accurate, absolute levels of probability are not precise, etc. Furthermore, there is no standard method available, which makes it difficult to know precisely what is included and what is not included in the simulations. The discussion also drew upon the results of the EC concerted action, which showed problems with the MT projection.

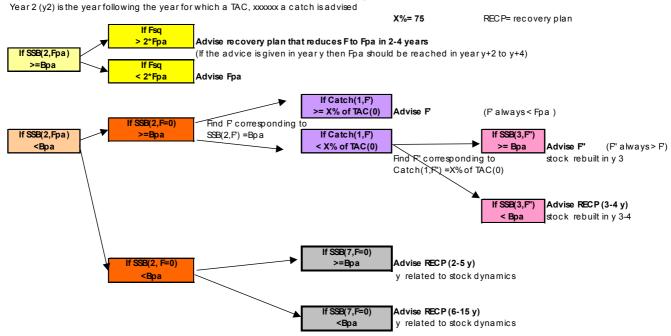
It was concluded that for the time being ACFM would maintain the medium term projections where required but introduce the following changes

- The graphs will only show 25%, 50% and 75 % fractiles. The 5 and 95 % fractiles that are presented for many stocks would be dropped;
- There will be developed a standard footnote to go with the MT projections in the Management option table;
- When the MT projections are used in the summary sheets ACFM should be careful to only give relative statements and avoid absolute statements of the form "the probability that SSB in 2008 is above \mathbf{B}_{pa} (800 000 t) is larger than 95 %".

ACFM recognised that further analysis of how best make use of the MT projections would be required and suggested that the chairs with the help of the Secretariat should develop a working paper for ACFM to look at in October with a view to introduce changes in the ACFM 2002 report. This group would furthermore work out some examples for ACFM to look at.

The chair reminded ACFM that it was decided on Tuesday 22 May that the advice formulation algorithm proposed by SGPA should be used internally and drew ACFMs attention to an alternative formulation of the same procedure (Flowchart) that Bengt Sjöstrand had circulated. This formulation might be more easy to present and quickly grasp.

A key to formulation of management advice by ACFM and others based on a given stock situation



4 PLENARY SESSION 25 MAY

The Friday session was opened and the Chair informed ACFM that apart from the usual round of progress reports by the sub-group chairs he intended to discuss the lay-out of the standard graphs that will go into the ACFM report. He noted that the Secretariat has distributed a proposal for an improved lay-out.

The chair informed ACFM that he was looking through the 2000 report and discovered numerous inconsistencies in how the MT projections were presented and that he would provide ACFM with a proposal for a standard.

The lay-out of the standard graphs was discussed and there were made many proposals for changes some of which relate to the lay-out and some were more fundamental to the information presented in the graphs.

4.1 Landings, SSB, F and Recruitment

These graphs should be separate (4 graphs in total). The SSB and F graphs should also show \mathbf{F}_{lim} , \mathbf{F}_{pa} , \mathbf{B}_{lim} and \mathbf{B}_{pa} where applicable. It should be considered at a later stage to include confidence limits for F, SSB and Recruitment curves. For some stocks the standard graphs may be too simplistic and an option for presenting landings and F by fisheries should be considered.

4.2 Stock- Recruitment Plot

The proposed smoothed graph was deleted. The graphs axes should include the (0,0) point. There was considerable discussion if some S-R curves, like Beverton & Holt and Ricker curves, would be more desirable than others. For the time being it was agreed that this would not be done. The point was made that any curve should reflect the assessment.

4.3 Short Term prediction

The decision to delete this graph was confirmed.

4.4 Yield plot

This plot should show the Yield per Recruit and SSB per recruit. SSB/R should be a full line while the Y/R line should be broken. If possible the \mathbf{F}_{max} and $\mathbf{F}_{0.1}$ should be shown.

4.5 Precautionary Approach Plot

The shading used hitherto should be kept and the time series should be indicated. The legend should be kept.

5 PLENARY SESSION 26 MAY

The chair opened the meeting at 9:00 and noted that he would only review progress at the subgroups at this session. There were no topics raised from the plenum and after reviewing progress that was satisfactory, he closed the meeting.

6 PLENARY SESSION 28 MAY

6.1 Ad 13. Nominations

- a) WGNEPH Only one person was nominated, Mike Bell from UK. It was agreed that a formal election was not needed, as there was no objection to his election.
- b) WGBAST It was agreed that the suggestion from the working group itself that the current Chair should continue for one more year should be followed. The Working Group have a candidate who will be able to take the post as Chair from next year. ACFM thus nominated a new Chair for only one year. Only one person was nominated, Tapani Pakarinen, Finland. It was agreed that a formal election was not needed, as there was no objection to his election.
- c) NWWG Only one person was nominated, Einar Hjörleifsson, Iceland. It was agreed that a formal election was not needed, as there was no objection to his election.

All three new Chairs are the ones suggested by the relevant working groups.

Ken Patterson apologised to the Committee for having to withdraw from the post of Chair of the Methods WG.

Ad 12 b) It was agreed that regarding the PA ref. Points (\mathbf{F}_{pa} and \mathbf{B}_{pa}) the phrase "proposed" should generally not be used in the text, but only in the PA table and in the management objective section. Also a comment on this new "format of advice" should be given in the introduction to the ACFM report.

It was agreed to switch the order of the sections: "Comparison with previous assessment and advice" and "Relevant factors to be considered in management, in the summaries.

There should be some text in the introduction to the ACFM report about medium-term projections stating the problems with them.

In the forecast table the column with the medium-term information should be deleted if there is no information available.

The special text section about medium-term forecast should only be kept if there is a medium-term analysis available.

Ad 19. AFWG. Cod NEA. There was a discussion about PA ref. Points. The sub-group suggested revisions of the points, because the historical stock estimates have been revised downwards. However, it was pointed out that the \mathbf{B}_{pa} defined as "...the value below which, the probability of below average year classes increases", can be regarded as inconsistent with the general definition given in the introduction to the ACFM report, stating that this is the definition of \mathbf{B}_{lim} . If this will mean a revision of the B reference points next year when the SGPA is expected to meet, it can be regarded as unfortunate to change the reference points also this year.

The new S-R plot was discussed. It was stated that actually some of the largest year classes were produced by small SSB. However, these were pair wise related to adjacent years (1963 - 1964 and 1969 - 1970) and this points to special environmental influences and it might be difficult to relate this to random variation in R around the S-R curve.

It was suggested that the new weight at age and maturity at age were significant improvements and although more analysis on the issue are needed, the new data were regarded as sufficient certain to be the basis for new decisions on PA reference points.

It was suggested to postpone the revision until this can be more carefully considered in the context of i.e. consistency with other stocks.

Status quo catch constraint was discussed extensively. If misreporting, high-grading, and discarding had been included in the assessment, the recent historical stock size estimates would have been higher. The *status quo* constraint can be regarded as an ad hoc "fix" for certain types of uncertainties in the assessment, because of the cancellation of errors. The implicit statement - if the *status quo* catch is not close to the TAC - that managers are not able to control catches is unfortunate and some softening of the presentation is needed. It should be stated in the summary for each stock why a specific choice of assumption of intermediate year catch has been taken.

Ad 11. The assessment working groups might be asked to insert a figure or table in the Working Group report with the last 5 years assessments in terms of F and SSB. To have these included in the Working Group report will make the review easier. The QCS are often not completed by the working groups. There were several suggestions about how the situation could be improved. Some suggested to rather improve the current QCS and include more about the short-term projection values. The issue was regarded as a part of the general quality control discussion.

7 PLENARY SESSION 30 MAY

Alain Maucorps and David de G. Griffith participated.

It was decided that a sub-group of ACFM should met in parallel with the present Plenary to sort out the Baltic herring stock unit issue. The Group consisted of: Frans van Beek (Chair), Hans Lassen, George Kornilovs, Bengt Sjöstrand, Holger Hovgaard, Thomas Gröhsler, Juka Pönni, Jan Horbowy, Carl O'Brian as reviewer, and Jakup Reinert as Chair of the Baltic Sub-group.

After the sub group meeting George Kornilovs made the following statement for the minutes:

According to the Terms of Reference Study Group on the Herring Assessment Units in the Baltic Sea has proposed two new assessment units in the Main Basin of the Baltic Sea (Sub-divisions 25-29, 32). The choice of these assessment units was based on the available knowledge on migration pattern of herring in the Baltic Proper according to tagging experiments, hydro-acoustic surveys and studies of herring otolith structure peculiarities in different seasons and regions of the Baltic Sea. It took also into account the availability of biological data to carry out these assessments. The following new assessment units were proposed: herring in Sub-divisions 25-27 and herring in Sub-divisions 28 (Gulf of Riga herring excluded), 29 and 32. Besides Study Group supported separate assessment of Gulf of Riga herring that is already performed. The Study Group recognized that the documented and assumed herring migrations between the proposed assessment units would not be critical for the quality of the assessments. The Study Group considered that the uncertain character of the present combined assessment in Sub-divisions 25-29, 32 (including Gulf of Riga) is due to merging of different herring populations neglecting the differences in basic biological parameters. It was specially stressed in relation to the Gulf of Riga herring that it is well defined and distinguished population of herring that should be assessed separately and should not be included in other assessment units. It was proposed that this should be clearly expressed by ACFM for the knowledge of IBSFC, however, it was not supported by the majority.

At the ACFM Meeting it was a general opinion that the new assessment units were not well documented (except for the Gulf of Riga herring), the extent of mixing between these units is not known and the Study Group should continue its work for more profound scientific justification. It was not taken into account whether the proposed units could serve for assessment/management purposes despite of the fact that the combined assessment does not show the state of the stock in different parts of the whole area and the over-exploitation of local populations is highly possible. It was also a general opinion that in relation to the new proposed units ACFM Report should present only the assessment results as required by IBSFC and the advice on management will be given as previously on the base of the assessment of the combined stock (Sub-divisions 25, 29 and 32). It was not taken into account that according to the results of the new assessments the herring in the northern part of the Baltic Sea is much more over-exploited than in the south and consequently different management measures would be appropriate.

7.1 Ad 8 c). Handbook and Manual

The future plan with the handbook and manual was discussed. Generally, the feedback from the working groups were negative. However, it was mentioned that one would expect working groups mainly to state the negative comments.

It was suggested that the RMC should take the lead on this issue and they should consider this already at the ASC 2001.

Ad 8 a) Concerted action. Ken Pattersson presented the report of the EC Concerted Action.

The 5% and 95% confidence limits were generally very uncertain. The 25% and 75% were much better.

The XSA gave a very optimistic forecast mainly due to over estimation of survivors.

The 65 stock data collected for testing might be a good sample for use when testing new methods put forward for use in assessment working groups.

It was stated that one of the main results of the Concerted Action study is that ICES is giving advice assuming that the assessment are more precise than they actually are.

Relative changes in biomass are better estimated than absolute values. It was suggested that ACFM should shift to give advice based on relative stock developments instead of on absolute ones. One problem with this is, however, that this will mean that the current PA set up will have to be changed to be based on relative "limit" and "pa" values instead of on absolute ones. Also the fact that ICES is giving advice on absolute catch not on relative catch might be a problem.

It seems important that it is made clear what part a method that goes wrong. This is not expected to be an easy job, but one possibility is that it can be dealt with by future groups like Methods WG, dealing with these issues.

The main question is now how the results of the Concerted Action study are brought forward to the ICES work. The Method working groups might take a look at this as well. This Group could be asked to come up with suggestions for how we change the process of the routine assessment. Also the SGPA, which is expected to meet during the winter of 2001/2002, might be involved. This will need some planning and making sure that the right people are coming to the meetings.

A short-term change should already now be implemented, namely a disclaimer in the ACFM text that states that the 5% and 95% limits are very uncertain. This has to be done carefully so that it does not introduce inconsistencies in the ACFM report, with the advice, the rationale for the PA reference points, etc.

It is important to send signals to the outside world that ICES is responsive to information from outside.

This discussion should be brought to MCAP and maybe also to the client commissions.

It was agreed to insert the disclaimer wherever a probability statement is given in the summaries.

Ad 8 d). ICES is at the moment missing a medium-term program with a user guide, which can be connected to the XSA.

Ad 9 a). NEAFC. Tore gave a short note on this. Redfish was in focus, because most of the other stocks are dealt with bi-laterally beforehand regarding fisheries inside EEZs.

Ad 9 e). NEAFC Extraordinary meeting on Rockall haddock. Tore Jakobsen told about this meeting. The issue was that due to changes of EEZ in the area new management agreements are needed. Biological information was used to close part of the area for fishing to protect juveniles.

The EU Observer mentioned that EC was very pleased that ICES was able to handle this request outside the normal working routine of ACFM and assessment working groups.

Ad 9 f) BACOMA meeting. Tore represented ICES and informed the committee about the meeting. A mesh size increase was agreed. Not to the full extent advised by ICES but a significant step in the direction of increased protection of juvenile cod.

Ad 9 d) FAO interregional fisheries body meeting. Henrik gave a short note on this and mentioned that during this year ideas for special topics to be discussed at the next meeting in 2003 were welcome. Henrik mentioned that one suggestion for a topic could be discards. The idea with the meeting is to exchange experience and ideas between regional fisheries bodies.

Ad 9 g) HELCOM. Henrik gave a short note on this. The ICES presentation of the status of Baltic fish stocks, on ecosystem effects of fishing and interaction between seals and salmon fishing, were well received.

Ad 11 c). Review of alternative advice procedures.

The procedure with <u>NASCO</u> issues seems to be a success. NASCO gets its advice in time and ACFM does not need to spend time on it at the ordinary meeting. It might be a problem in future meetings to find experts within ACFM, who can take over from the current ACFM participants. ACFM should already now consider, who ACFM can involve in the process.

The NASCO issue should be seen in the context of the present discussion in ICES about creating a new salmon committee, or other arrangements, which will strengthen the salmon work in ICES.

The Rockall meeting. It is expected that more of this type of meetings will be needed in the future and ICES should be positive on this.

The Baltic cod in year TAC advice revision in 2000. The ACFM Sub-Group meeting in spring 2000 ran into several problems, but probably mostly accidental nature, as unusual errors in the data from some countries. Under normal circumstances conducting meetings like this with only a handful of people, might be a good way of dealing with some advisory tasks.

Ad 12 a) The "Safe Biological Limit" (SBL) term was discussed. The problem is that some readers (Norwegian managers, Joe Horwood in his letter touch upon the issue, CITES people and NGOs) get the impression that the stock is in danger of extinction if ICES says it is outside SBL.

Regarding the F level, the phrase "harvested outside biological limit" might be even more difficult to understand for some, because often the stock size is well above \mathbf{B}_{pa} .

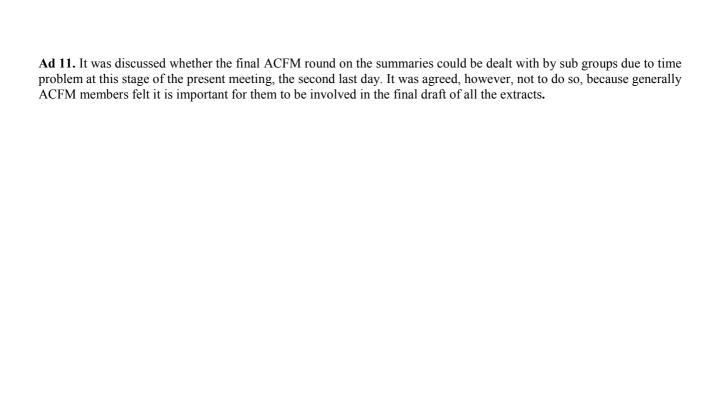
It was agreed to keep the term because it has gained a status of its own over time. It should, however, be clearly described what it means somewhere in the ACFM report. At the moment there is some text in the section about the Form of Advice, and maybe this section should be expanded.

Ken's template or table with the various reference points and statements about what the points mean in terms of sustainability might be useful to include in the text as it might make it more clear what SBL means. This approach might be considered by the SGPA at its next meeting.

Ad 16. Meeting facilities at the ICES HQ is now better. In the Beverton room area the computer section has moved out and there are better space for a big group. The WGECO used it a few weeks ago and found it quite suitable for a group of around 20 participants. Thus, there should be space enough in the ICES HQ for the two groups meeting simultaneously in September.

Some were concerned about the very tight time schedule for the September and October meetings with working groups and ASC in late September and ACFM in mid-October. Editing and checking reports, reading them, participating in the ASC and preparing for ACFM meeting might be difficult. For the future it might be considered to have one of the two working groups meeting outside the ICES HQ. The time schedule is pushed to the limit and this is also clear from the current meeting. If things are not running smoothly it might be a disaster.

David mentioned that it had been very difficult to reconcile all the demands from managers, ICES working groups, the Secretariat etc., but suggested that it was better to wait evaluating the set up until it was tried out.



APPENDIX I

Agenda item: A.2 ACFM MAY 2001

Agenda

Advisory Committee on Fishery Management Højstrupgård in Helsingør, 22–31 May 2001

Plenary Sessions 22 May and 28-31 May 2001

- 1) Opening
- 14) Meeting facilities (Plan for rebuilding the ICES HQ). Information by the General Secretary
- 2) Adoption of agenda and timetable
- 3) Approval of minutes and technical minutes from October 2000 ACFM meeting and sub-group in April 2001
- 4) Documentation and Requests for Advice
- 5) MCAP report
 - a) ACE ACFM relationship
 - b) Letter from Joe Horwood
- 6) WGCOOP report
- 7) Study Group on Further Development of the Precautionary Approach to Fisheries Management (ACFM)
 - a) Guidelines for establishing stock rebuilding plans
- 8) ACFM Quality Management Procedures
 - a) Report from the EC Concerted Action looking at medium term projections
 - b) Forecast the mid-year problem
 - c) Manuals and Handbook
 - d) Assessment software Medium term prediction programs
 - e) Communication of ACFM advice The inclusion of Technical Minutes in the Assessment Reports
- 9) Reports from meetings with Cooperative Organisations
 - a) Report of the 2000 NEAFC Annual Meeting
 - b) EC, ACFA meeting 1 December 2000
 - c) North Sea Commission Partnership for Fisheries meeting February 2001
 - d) FAO and Non-FAO Regional Fishery bodies meeting 20-21 February 2001
 - e) Extraordinary NEAFC meeting 22-23 March 2001
 - f) IBSFC BACOMA meeting 13-14 March 2001
 - g) HELCOM Fourth periodic assessment 20 March 2001
- 10) Matters requiring ACFM/ACME coordination
 - a) Fifth International Conference on the Protection of the North Sea and intermediate ministerial meeting

- b) OSPAR
- c) HELCOM
- 11) ACFM working protocols and Form of Advice
 - a) Advice Principles and Consistency
 - b) Review of alternative advice procedure
 - i) NASCO
 - ii) NEAFC Rockall Haddock
- 12) ACFM report
 - a) Form of advice
 - b) Format of the report
 - c) Introductory items
 - d) Table of contents
- 13) Election of Working Group Chairs (WG proposal in brackets)
 - a) WGNEPH [Mike Bell (UK)]
 - b) WGBAST [Tapani Pakarinen (Finland) to continue for one more year]
 - c) NWWG [Einar Hjörleifsson (Iceland)]
- 15) ACFM Consultations at the 89th Annual Science Conference 2001 in Oslo, Norway
- 16) ACFM meeting 9-17 October 2001
- 17) Matters related to 2001 Annual Science Conference
- 18) Working and Study Group Reports
 - a) Ecosystem Effects of Fishing Activities (ACME)
 - b) Study Group on Herring Assessment Units in the Baltic Sea (ACFM)
 - c) Study Group on Discard and By-catch Information (ACFM)
 - d) Baltic International Fish Survey Working Group (BCC)
 - e) Study Group on Ecosystem Assessment and Monitoring (MHC)
 - f) Working Group on Marine Mammal Population Dynamics and Habitats (ACE)
 - g) Workshop on FLEKSIBEST (RMC)
 - h) International Bottom Trawl Survey Working Group (RMC)
 - i) Planning Group for a Workshop on Ecosystem Models (ACME)
- 19) Preparation of advice to Commissions and Member countries
- 20) Any Other Business
 - a) IFAP Status
 - b) EC Green Paper The Future of the Common Fisheries Policy
 - c) EC Action plan on Biodiversity for Fisheries
 - d) DG Env. Report. Environment Consideration in Fisheries Evaluation
 - e) Clarification of Multiannual TACs
- 21) Closing

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APPENDIX II

ACFM Sub-group meeting 23-26 May

	Sub-group	WG Chair	Reviewers	
	Chair		1. Rapporteur	2.
Herring	S. Cadrin	M. Basson	B. Sjöstrand	J. Rice
Baltic Salmon	J. Rice	T. Pakarinen	C. Porteiro	J. Pönni
Baltic Fisheries	J. Reinert	M. Plikshs	H. Hovgaard	C. O'Brien
North Western	D. Skagen	J. Boje	J. Horbowy	A. Forest
Deep Sea	C. Porteiro	O. A. Bergstad	A. Forest	G. Kornilovs
Sea Bass	C. Porteiro	M. Pawson	A. Forest	G. Kornilovs
Nephrops	F. Cardador	F. Redant	J. Molloy	T. Saat
Arctic Fisheries	F. van Beek	S. Mehl	S. Schopka	P. Kunzlik
Northern Pelagic	H. Heessen	A. Gudmundsdottir	T. Gröhsler	Y. Efimov

Wednesday 23 May - Reports

Sub-	Room	9-11	11-13	Lunch	14-16	16-18
group						
I	1	WGBFAS	WGBFAS		WGBFAS	WGBFAS
II	2	SGBASS	SGBASS		WGDEEP	WGDEEP
III	3	WGNEPH	WGNEPH		WGNEPH	WGNEPH

Thursday 24 May – Reports

Sub-	Room	9-11	11-13	Lunch	14-16	16-18
group						
I	1	WGBFAS	WGBFAS		AFWG	AFWG
II	2	WGNPBW	WGNPBW		WGNPBW	WGNPBW
III	3	WGNEPH	WGNEPH		WGBAST	WGBAST

Friday 25 May – Reports

Sub-	Room	9-11	11-13	Lunch	14-16	16-18
group						
I	1	AFWG	AFWG		AFWG	AFWG
II	2	HAWG	HAWG	i !	HAWG	HAWG
III	3	NWWG	NWWG	1 	NWWG	NWWG

Saturday 26 May - Reports and 2. Draft of Advice

Sub-	Room	9-11	11-13	Lunch	14-16	16-18
group						
I	1				2. Draft of a	dvice & draft
II	2	HAWG	HAWG		of technic	al minutes
III	3	NWWG	NWWG			

ACFM Plenary 22 May and 28–31 May

	9-11	11-13	Lunch	14-16	16-18
Tues.	Busin	ness		Bus	iness
22 May					
Mon. 28 May	Repo	ort		Rej	port
Tues. 29 May	· · · · · · · · · · · · · · · · · · ·		port		
Wed. Business 30 May			Re	port	
Thurs. 31 May	Repo	ort		Rej	port

APPENDIX III

Agenda item: A.2 Presentation assignments ACFM MAY 2001

PRESENTATION ASSIGNMENTS FOR ACFM MEETING MAY 2001

REPORT	SUB-GROUP CHAIR	PRESENTER	REVIEWER	SUB- GROUP
Herring South of 62°N	USA	M. Basson	Sweden/Canada	I
Baltic Salmon and Trout	Canada	T. Pakarinen	Spain/Finland	II
Baltic Fisheries	Faroe Islands	M. Plikshs	Denmark/ RMC Chair	III
North Western	Norway	J. Boje	France/Poland	IV
Northern Pelagic and Blue Whiting	Netherlands	A. Gudmundsdottir	Germany/Russia	V
Arctic Fisheries	ACFM Vice- Chair	S. Mehl	Iceland/UK	VI
Working Group on Nephrops Stocks	Portugal	F. Redant	Ireland/Estonia	VII
Study Group on Sea Bass	Spain	M. Pawson	France/Latvia	VIII
Deep-Sea Fisheries Working Group	Spain	O.A. Bergstad	France/Latvia	IX
Ecosystem Effects of Fishing Activities		J. Rice		Plenary
Study Group on Further Development of the Precautionary Approach to Fishery Management	C. Bannister			Plenary
Study Group on Herring Assessment Units in the Baltic Sea	Sweden			Plenary
Study Group on Discard and By-catch information	Iceland			Plenary
Baltic International Fish Survey Working Group	Latvia			Plenary
SG on Ecosystem Assessment and Monitoring		Canada		Plenary

Working Group on Marine Mammal Population Dynamics and Habitats	UK	Plenary
Workshop on FLEKSIBEST	Norway	Plenary
International Bottom Trawl Survey Working Group	Netherlands	Plenary
Planning Group for a Workshop on Ecosystem Models	Canada	Plenary
Planning Group for Herring Surveys	Tabled	
Workshop on Deep-seabed Survey Technologies	Tabled	
Study Group on Baltic Herring and Sprat Maturity	Tabled	
Study Group on the Evaluation of Current Assessment Procedures for North Sea Herring	Tabled	
Planning Group on Redfish stocks	Tabled	
Working Group on Cephalopod Fisheries and Life History	Tabled	
Workshop on Identification and Staging of Mackerel and Horse Mackerel Eggs	Tabled	
Workshop on International Analysis of Market Sampling and the Evaluation of Raising Procedures and Data-storage (software)	Tabled	
Study Group to Evaluate the Effects of Multispecies Interactions	Tabled	
Working group on Seabird ecology	Tabled	
SG on the Biology and Life History of Crabs	Tabled	
Baltic Herring Age-Reading SG	Tabled	
SG on Incorporation of Process Information into Stock Recruitment Models	Tabled	