# ICES New Group Resolutions 2003 (including Workshops)

- 2MCAP02 A **Study Group on Quality Assurance** [SGQUA] (Chairs: M. Waldock, UK) will be established and will meet at ICES Headquarters for 3 days in January 2004 at Council expense (for Study Group Chair and Advisory Committee Chairs) and at national expense (for other members).
  - a) review progress in achieving the ICES Quality Policy (CM 1999/DEL 21);
  - b) identify gaps and how best to fill them;
  - c) oversee preparation of documentation of the quality control procedures of ICES.

SGQUA will report by 31 January 2004 for the attention of MCAP.

Priority:	The credibility and reliability of ICES Advisory and Science programmes will be impaired if this process is not initiated.
Justification:	ICES vision is that of "An international scientific community that is relevant, responsive, sound, and credible, with respect to marine ecosystems and their relation to humanity" (Strategic Plan). Fulfilling the vision depends on the quality of the scientific programmes and products of ICES. In 1999, the Council adopted a Quality Policy (CM 1999/ DEL 21). The Policy called for:
	<ul> <li>A Quality Control programme that addressed quality control to ensure that errors are detected and corrected at all stages in the process of preparing scientific advice;</li> <li>Internal Peer Review by independent reviewers (different from the scientists that prepare scientific products) as part of the advisory process; and</li> <li>External Peer Review by reviewers outside of the ICES Community to ensure that the science on which ICES advice is based conforms to the highest international standards.</li> </ul>
	Since 1999, the Advisory Committees and the Secretariat has taken many steps to address quality control. The Study Group on ACFM, ACE and ACME Working Group Working Protocols (SGAWWP, <b>Del:9</b> ) also addressed the issue of peer review. While important progress has been made since 1999, it is uneven. Furthermore, ICES lacks documentation of its quality control programme suitable for release to users of ICES advice and other stakeholders. A Study Group is needed to review progress and invigorate quality assurance efforts.
Resource Requirements:	
Participants:	Representatives from the Advisory Committees and other members nominated by delegates
Secretarial Facilities:	Support of Secretariat Staff involved with data bases, advisory activities and quality assurance.
Financial:	
Linkages To Advisory Committees:	ACE, ACME and ACFM are closely involved with this process.
Linkages To other Committees or Groups:	

Linkages to other Organisations	
Secretariat Cost Share	ICES 100%

### 2ACFM24 Study Group on Assessment Methods Applicable to Assessment of Norwegian Spring Spawning Herring and Blue Whiting Stock [SGAMHBW] will be established (Chair: Steve Murawski, USA [to be confirmed]) and will meet in Lisbon, Portugal from 7–10 February 2004 to:

a)analyse and evaluate the assessment methods that are considered in assessing Norwegian Spring Spawning Herring and Blue whiting

b) identify for each method the types of population dynamics and data availability for which the method is applicable and relate this to the dynamics observed for the Norwegian spring spawning herring and blue whiting;

c)devise a method that include the strong points of all the proposed methods;

SGAMHBW will report to AFWG, WGNPBW, WGMHSA and ACFM.

The work of the study group is essential to improving the precision of the assessment of Norwegian Spring Spawning herring and Blue Whiting as requested by ACFM.

Priority:	
Scientific	[Action numbers 4.2, 4.3]
justification and relation to Action Plan	In 2001 and in 2002 WGNPBW has reviewed and attempted to apply a number of methods for the assessment of Norwegian Spring Spawning Herring and for blue whiting. The different methods make different assumptions of the error structure in the observed data and apply different subsets of the available data. The estimates produced by these different methods are in some cases widely different. This SG is established to clarify the conditions under which each methods is applicable and relate these conditions to the population dynamics and data availability for Norwegian Spring Spawning herring and Blue whiting.
	It appears that each method has certain strong points and focus on particular features of the data. It appears to WGNPBW and ACFM that it should be possible to devise a method that would pick up the strong point of each method and construct a combined method that would be preferable to each of the existing methods. The SG is asked to consider this possibility.
	The group is also asked to report to WGMHSA as these assessment method analyses may prove useful also in connection with assessment on sardine.
Resource	
requirements	
Participants:	Include scientists with a background in development of assessment methods and with a background in assessment of Norwegian Spring Spawning herring and blue whiting. Experts knowledgeable in: C-star, AMCI, ISVPA should also participate.
Secretariat Facilities:	None.
Financial:	No financial implications.
Linkages to advisory committees:	Requested by WGNPBW and endorsed by ACFM.
Linkages to other	
committees or	
groups:	
Linkages to other	
organisations:	
Secretariat Cost Share	ICES:100%

2ACFM25 A **Study Group for Long Term Advice** [SGLTA] (Chair: P. Degnbol, Denmark) will be established and will meet at ICES Headquarters from 23–28 February 2004 to:

- a) review the approach presented by WGMG regarding conservation limits and long term reference points and plan implementation by the Assessment Working Groups;
- b) review developments in stock assessment methodology in relation to the implementation in the Assessment Working Groups;
- c) review and plan implementation of long term management simulations and evaluations of recovery plans and harvest control rules as presented by WGMG;
- d) review progress made by SGDFF and plan implementation of fisheries based advice by the Assessment Working Groups;
- e) respond to feedback from meeting to be held by NSCFP meeting in October 2003.

SGLTA will report by 31 March 2004 for the attention of ACFM

	The ad hoc group is instrumental in the process to allow for the assessment working groups becoming able to produce the input required for the new form of advice to be introduced from 2004.	

Priority:	
	[Action numbers 3.2, 4.13, 4.15]
S c i e n t i f i c justification and relation to Action Plan:	The ICES advice on fisheries will in the future emphasise longer term management issues. It will address the practical situation of fisheries management better by being both stock and fisheries-oriented and it will increasingly include ecosystem considerations. These changes are introduced as a response to changes in the policy and management environment including both recent international agreements and resolutions such as the WSSD 2002 declaration and requirements from clients as expressed in the MOU between ICES and the European Commission.
	In order to introduce these changes there is a requirement to develop or operationalise the necessary approaches and methodologies and to enable the working groups to implement these approaches in order for ACFM to have the relevant input for the advice as required to address new aspects of the advice. The SGDFF will meet in January 2004 to prepare the fisheries aspects and the WGMG will meet in February 2004 to work on new reference points and operational model simulations as required for long term advice. The group will serve as the interface between this work and the working groups as the chairs of the SGDFF and WGMG and other relevant experts will introduce these approaches to chairs of assessment working groups and the group of chairs will have a forum to discuss and decide on the implementation in the course of WG meetings in 2004.
Resource requirements	
Participants:	Chairs of assessment working groups, chairs of SGDFF and WGMG and relevant experts, especially regarding operational model simulations.
	chairs of AFWG, HAWG, NWWG, WGNPBW, WGNSDS, WGBFAS, WGNSSK, WGSSDS, WGHMM, WGMHSA, WGNEPH, WGPAND, WGMG and SGDFF and relevant experts regarding simulations
Secretariat Facilities:	
Financial:	
Linkages to advisory committees:	ACFM
Linkages to other committees or groups:	RMC through the WGMG
Linkages to other organisations:	This work serves as a mechanisms in fulfilment of the MOU with EC
Secretariat Cost Share	ICES:100%

2ACFM26 A **Study Group on Closed Spawning Areas of Eastern Baltic Cod** [SGCSA] (Co-Chairs: Hans-Harald Hinrichsen, Germany and Fritz Köster, Denmark) will be established and will meet at Charlottenlund, Denmark from 9–12 March 2004 to:

- a) review up-to-date information on hydrographic conditions in the Central Baltic with respect to successful spawning of cod in summer 2004;
- b) describe recent information on spatial and temporal distribution of cod spawning activity;
- c) identify hydrographic conditions required for good egg survival in different spawning areas in 2004;
- d) outline potential closed areas and timing of closures for different fisheries to protect successful cod spawning, this includes an analysis of cod by-catch in the small mesh fishery directed to sprat;
- e) consider the possible effect of these closures on the different fisheries conducted in the Central Baltic.
- SGCSA will report by 2 April 2004 to the WGBFAS and ACFM as well as the Baltic Committee.

Priority:	The SG will predict cod spawning conditions in the Central Baltic in 2004. The
-	results may be used in a fast track procedure on the introduction of closed areas
	to protect successful spawning activity in 2004.
Scientific Justification:	In response to a request from IBSFC to identify areas to be considered for fisheries closures in the Central Baltic, ICES suggested a fast track procedure to be implemented in spring 2004. This procedure should outline potential areas for fisheries closures to protect successful cod spawning in 2004, utilising newest information on environmental conditions available in March, i.e. after the winter inflow period. Based on i) available information on temporal and spatial distribution of spawning activity from 1.quarter BITS and pelagic trawl surveys conducted in spawning areas within STORE, ii) prevailing hydrographic conditions in the beginning of 2004 from hydrographic and BITS surveys, iii) inflow patterns of saline and oxygenated water between different basins in the central Baltic as observed in previous years, and iv) oxygen depletion rates, environmental conditions for egg survival will be predicted for the major spawning areas of cod in the central Baltic. Based on predicted spawning conditions and the distribution of spawning effort, potential closed areas to ensure undisturbed spawning activity will be outlined and the effect of these closed areas on the cod and sprat fisheries in the Central Baltic will be investigated.
Relation to Action Plan	Action Item 1.3 and 3.5
Resource Requirements:	
Participants:	
Secretariat Facilities:	
Financial:	
Linkages to Advisory	ACFM
Committees:	
Linkages to other Committees or	BC and OC
Groups:	
Linkages to other Organisations:	Participation from BRSP and BOOS will be invited
Cost Share	ICES 100%

2ACFM28 A **Study Group on Ageing Issues in Baltic Cod** [SGABC] (Chair: Johan Modin, Sweden) will be established and will meet in Riga, Latvia from 11-14 May 2004 to:

- a) review the extent of ageing inconsistencies and the impact of these on stock assessments and predictions;
- b) revise the age estimation procedures and explore the possibilities to utilize supplementary information for validating estimated age structures. Available methods include:
  - i. cod length distribution in surveys and catches;
  - ii. cod otolith size distributions
- c) explore the feasibility of using alternative age partitioning for assessments;
- d) produce a plan of implementation including time schedule, sub-projects and funding proposals if required.

SGABC will report by 20 May 2004 for the attention of ACFM, Baltic Committee the Living Resources Committee,.

#### **Supporting Information**

Priority:	The work of this Group is considered important as it is necessary to evaluate the effects of different age readings regarding to the stock assessment for finalising the discussion during the assessment working groups and the ACFM meetings
Scientific Justification and relation to Action Plan	Action Item 3.1 and 3.5 Different interpretations of the otolith structure of Baltic cod are used by the different countries. Horbowy 1997 (EU 94/58) thus found large differences in age per length class for western Baltic cod (Danish, German) and for eastern Baltic cod. Reeves studied the effects age-reading errors on stock assessment and advice pointing out that the perception of stock trends is strongly influenced by the age-reading problem. Study groups on Baltic cod age reading (ICES 1997, 2001) and the EU project 94/58 were unable to agree on common procedures of interpreting cod age from otoliths. Continued work to resolve the ageing ambiguity therefore requires inclusion of supplementary information, as e.g. the cod length distribution in surveys and catches or detailed information on otolith size distribution.
Resource Requirements:	
Participants:	
Secretariat Facilities:	
Financial:	
Linkages to Advisory Committees:	ACFM
Linkages to other Committees or	Baltic, LRC
Groups:	the review group for WGBFAS to whom it will also report
Linkages to other Organisations:	
Secretariat Cost Share	ICES 100%

#### 2ACFM29 A **Study Group on Stock Identity and Management Units of Redfishes** [SGSIMUR]. Chair: Kjell Nedreaas, Norway will be established and will meet in Bergen, Norway from 31 August–3 September 2004 to:

- a) review all reported material on the stock identity of the various redfish units (S. mentella) in the Irminger Sea and adjacent waters;
- b) identify the most likely definition of biological stocks of *S. mentella* as well as suggest practical management units.

SGSIMUR will report by 15 April 2004 for the attention of RMC, ACFM and NWWG.

Priority:	
Scientific Justification and	[Action numbers 4.2, 4.3]
relation to Action Plan	

A prerequisite to sound management is proper definition of stock unit. Uncertainty in the definition of stock units of redfish (S. mentella) in the Irminger Sea and adjacent waters has been a matter of continuous debate among assessment scientists for a number of years. Within the NWWG there is a consensus that the group is primarily an assessment group and does not have sufficient expertise to thoroughly review the scientific research of redfish stock identification which has been a part of its ToR for a number of years. The methodological approaches used include genetic differentiation, morphometrics, parasitology, growth patterns, and trace element analyses. This autumn a multinational EU project on the stock identification will conclude in the form of a report that will provide further information on this matter. It is considered essential that a separate group of experts, from the fields of stock identification as well as assessment, review all published information on the stock delineation of the redfish in the Irminger Sea. The objective of the group should be to identify the most likely definition of biological stocks of the S. mentella as well as suggest practical management units.Resource Requirements:		
Participants:		Irminger Sea and adjacent waters has been a matter of continuous debate among assessment scientists for a number of years. Within the NWWG there is a consensus that the group is primarily an assessment group and does not have sufficient expertise to thoroughly review the scientific research of redfish stock identification which has been a part of its ToR for a number of years. The methodological approaches used include genetic differentiation, morphometrics, parasitology, growth patterns, and trace element analyses. This autumn a multinational EU project on the stock identification will conclude in the form of a report that will provide further information on this matter. It is considered essential that a separate group of experts, from the fields of stock identification as well as assessment, review all published information on the stock delineation of the redfish in the Irminger Sea. The objective of the group should be to identify the most likely definition of biological stocks of the <i>S. mentella</i> as well
Secretariat Facilities:	Resource Requirements:	
Financial:     ACFM       Linkages to Advisory     ACFM       Committees:     ACFM       Linkages to other Committees or     RMC       Groups:     Image: Commission Commission       Linkages to other Organisations:     Commission		
Linkages to Advisory     ACFM       Committees:     Image: Committees or Groups:       Linkages to other Organisations:     RMC	Secretariat Facilities:	
Committees:     Inkages to other Committees or Groups:       Linkages to other Organisations:     Interference	Financial:	
Linkages to other Committees or       RMC         Groups:       Linkages to other Organisations:	Linkages to Advisory	ACFM
Groups: Linkages to other Organisations:	Committees:	
Linkages to other Organisations:	Linkages to other Committees or	RMC
Cost Share ICES 100%	Linkages to other Organisations:	
	Cost Share	ICES 100%

- 2ACE02 A Study Group on Ecological Quality Objectives for Sensitive and for Opportunistic Benthos Species [SGSOBS] (Chair: K. Essink, The Netherlands) will be established and will meet at ICES Headquarters from 22–24 March 2004 to:
  - a) in continuation of the development of EcoQ element (o) Density of sensitive (e.g., fragile) species and EcoQ element (p) Density of opportunistic species to [OSPAR 2004/1]:
    - i. taking into account developments in implementing the Water Framework Directive, identify possible species,
    - ii. for the species identified, commence development, on the basis of the criteria for sound EcoQOs established by ICES in 2001, of related metrics, objectives and reference levels for this EcoQO;
  - c) for these EcoQ elements, to consider further the spatial scale requirements of sampling and the adequacy of existing monitoring activities to determine their status and trends, and provide further advise based on scenario considerations on the applications of possible EcoQOs;
  - d) where possible and appropriate, reconstruct the historic trajectory of the metric and determine its historic performance (hit, miss or false alarm) relative to the objective being measured, as a basis for deciding the relationship to management. This requires the collection of the relevant available historic data/information;
  - e) taking into account all potential sources of relevant information, determine what information it will be possible to collect in future to assess whether the EcoQO is being met (taking into account practicability and costs);
  - f) develop draft guidelines, including monitoring protocols and assessment methods, for evaluating the status of, and compliance with, the EcoQO.

SGSOBS will report by 1 April 2004 for the attention of WGECO, BEWG, ACE, and the Marine Habitat Committee.

Priority:	High
Scientific Justification:	This is work in response to an OSPAR request.
Resource Requirements:	Meeting room at ICES Headquarters required.
Participants:	Experts in relevant fields from the ICES area will be invited to participate.
Secretariat Facilities:	The Secretariat will be involved as normal in general professional and secretarial support, and the Secretariat should provide direct assistance during the workshop. The Secretariat might provide web space for the proceedings.
Financial:	
Linkages to Advisory Committees:	ACE
Linkages to other Committees or Groups:	BEWG, WGECO, MHC
Linkages to Other Organizations:	OSPAR
Secretariat Cost Share:	OSPAR:100%

- 2ACE05 A **Study Group to Review Ecological Quality Objectives for Eutrophication** [SGEUT] (Co-Chairs: Ted Smayda. USA, and Gunni Ærtebjerg,. Denmark) will be established and will meet at ICES Headquarters from 25–27 March 2004 to:
  - a) in relation to the five Ecological Quality Elements related to eutrophication, i.e., EcoQ element (m) Changes/kills in zoobenthos in relation to eutrophication, EcoQ element (q) Phytoplankton chlorophyll *a*, EcoQ element (r) Phytoplankton indicator species for eutrophication, EcoQ element (t) Winter nutrient (DIN and DIP) concentrations, and EcoQ element (u) Oxygen [OSPAR 2004/1]::
    - ii.review these EcoQOs, their scope and application, and means for their use as an integrated set and considering their parallel use as assessment criteria in the OSPAR Comprehensive Procedure (COMPP);
    - iii. provide the basis for the advice on the use and implementation of the current integrated set of five ecological quality elements and related EcoQOs to the whole OSPAR maritime area,
    - iv. reconsider the formulation of the EcoQO, determine whether a more specific EcoQO is needed in terms of its specification to the metric, time and geographical area, and as necessary propose (a) more specific EcoQO(s);
  - b) consider new EcoQ elements/EcoQOs (eg nutrient budgets, nutrient ratios, macrophytes) related to eutrophication, and as necessary propose new EcoQOs which could be used in addition to or as replacement for the EcoQ's considered in a)

SGEUT will report by 1 April 2004 for the attention of ACE, ACME, and the Marine Habitat and Oceanography Committees.

Priority:	High
Scientific Justification:	This is in response to an OSPAR request. OSPAR has already undertaken a considerable amount of work with respect to the assessment of the degree of eutrophication, especially in the North Sea. The Study Group should as a first step analyse in detail all of the work undertaken by OSPAR, especially with respect to EcoQO's-eutro and The Ospar Comprehensive Procedure.
Resource Requirements:	Meeting room at ICES Headquarters required.
Participants:	Experts in eutrophication issues (physics, phytoplankton, benthos, marine chemistry). OSPAR should encourage participation of their own experts in this field. Scientists from outside of the OSPAR area would be particularly valuable to this group
Secretariat Facilities:	The Secretariat will be involved as normal in general professional and secretarial support, and the Secretariat should provide direct assistance during the workshop. The Secretariat might provide web space for the proceedings.
Financial:	
Linkages to Advisory Committees:	ACE, ACME

Linkages to other	OCC, MHC, WGPE, BEWG, MCWG,
Committees or Groups:	WGECO, to whom it will make its report available.
Linkages to Other	OSPAR
Organizations:	
Secretariat Cost Share:	OSPAR:100%

- 2B02 A Study Group on Collection of Acoustic Data from Fishing Vessels [SGAFV] (Chair: W. Karp, USA) will be established and will meet in Gdynia, Poland, from 16–17 April 2004 to:
  - a) review and evaluate recent and current research which involves collection of scientific acoustic data from commercial vessels,
  - b) develop standardized methods and protocols for collection of acoustic data to address specific ecosystem monitoring, stock assessment and management objectives including: acoustic system calibration and performance monitoring, characterization of radiated vessel noise, comparability of results, survey design, biological sampling, data interpretation and analysis, and data storage and management, and
  - c) prepare background material, guidelines, methods and protocols for possible publication in the *Cooperative Research Report* series.

The Study Group will report by 31 May 2004 for the attention of the Fisheries Technology Committee.

Priority	Acoustic data is currently being collected from commercial vessels in many countries to address a range of ecosystem monitoring and stock management objectives. Methods, standards, and protocols for this type of data collection activity are lacking, and concerns regarding instrument performance and calibration, fish behavior in relation to radiated vessel noise, survey design, biological sampling, data interpretation and management, and other factors have arisen. There exists an urgent need to evaluate this work and to develop methods, protocols and guidelines for appropriate collection and use of acoustic data from commercial vessels. This need has been identified by a number of ICES member countries and observer countries and has been conveyed to WGFAST and FTC.
Scientific Justification and relation to the Action Plan	Action Item 4.10 Creation of a new Study Group Action Item 1.10, 1.12.5, 1.14, 3.13 – a Action Item 1.13.1, 1.13.4, 1.13.5 – b Action Item 6.3 - c Term of reference a): Collection of acoustic data in support of ecosystem monitoring, stock assessment and other scientific objectives has traditionally been carried out with calibrated scientific instruments aboard research vessels. Demands for this type of information have continued to expand and, in many cases, now exceed the capacity of national research vessel fleets. At the same time, improvements in technology have made instruments capable of collecting scientific-quality acoustic data more widely available, and these types of instruments are being installed on many commercial fishing vessels. Scientists have taken advantage of this opportunity to collect data in support of a range of research and assessment objectives.
	Term of reference b): Standardized methods and protocols have been developed for routine acoustic surveys aboard research vessels, and concerns regarding research vessel radiated noise impacts on fish behavior have received significant attention by WGFAST and the broader scientific community. However, standardized methods, protocols and guidelines for collection of acoustic data from commercial vessels do not exist, and objective criteria for matching data collection procedures with research objectives, or for evaluating data quality are lacking. While commercial vessels equipped with calibrated commercial sounders are suitable for collecting data in support of some specific research and survey objectives, use of these platforms and instruments will not always be appropriate. Research vessels and calibrated scientific acoustic systems will be preferred in most situations but will not always be available.

	<ul> <li>Term of reference c): There is a demanding need to develop this international standardization of methods and protocols and have them published in an easily accessible report.</li> <li>WGFAST and FTC further recognized the difficulty of addressing these needs during full working group sessions and supports the establishment of a study group with a group of experts to undertake this specific task of developing standardized methods, protocols without delay. This Study Group will meet three times.</li> </ul>
Resource requirements	No new resources will be required for consideration of these topics at the relevant group meetings. Having overlaps with WGFAST meetings, this SG will draw on a larger resource pool of experts which will increases efficiency in completing the objectives and reducing travel costs.
Participants	Interest has been expressed by scientists from 10 ICES member and observer countries. Members of the Study Group should include: Angela Barbieri (Chile), John Breslin, Paul Fernandes (UK), François Gerlotto (France), Mariano Gutierrez (Peru), Bill Karp (USA-Chair), Rudy Kloser (Australia), Gary Melvin (Canada), Ian McQuinn (Canada), Ron Mitson (UK) and Atle Totland (Norway).
Secretariat facilities	None.
Financial	No financial implications. Having overlaps with other meetings of expert groups of FTC increases efficiency and reduces travel costs.
Linkages to Advisory Committees	There are no direct linkages to the advisory committees but the work is of relevance to ACFM
Linkages to other organisations	No direct linkages, however, depending on the outcome organizations such as FAO will be interested in the results
Linkages to other Committees or Groups:	WGFAST. This work should have relevance to many working, groups carrying out stock assessment of many semi-demersal and pelagic species in many ICES countries
Cost Share	ICES 100%

# 2B09 A Study Group on Unaccounted Fishing Mortality [SGUFM] (Chair: Mike Breen, UK) will be established and will work by correspondence in 2004 to:

- a) consider issues relating to the sources of fishing mortality other than those that can be accounted for by the reported catch;
- b) report on the current knowledge of unaccounted mortality;
- c) review and make recommendations on methods used to estimate escape mortality from towed fishing gears.

SGUFM will report by 15 April 2004 for the attention of the Fisheries Technology Committee and ACFM

Priority	The current activities of this Group will lead ICES into issues related to quantifying sources of fishing mortality in addition to those that can be accounted for with commercial landings data. Consequently these activities are considered to have a very high priority
Scientific	Action Item 3.16,3.2,3.5 (a&b)
Justification	Action Item 3.16 (c)
and relation to	
Action Plan	It is anticipated that this Group will work entirely by correspondence. It will report annually to FTC on

	progress and produce a more detailed report at least every third year. This report will be passed to WGFTFB who will pass on their views for the consideration of FTC.
	Term of Reference a) & b). Previous ICES Study and Topic Groups (ICES Study Groups on Unaccounted Mortality, 1995 & 1997 and the ICES WGFTFB Topic Group on Unaccounted Mortality, 2000) have identified a range of potential sources of mortality in world fisheries, in addition to that accounted for by any reported catches. There is a clear need to improve our understanding of these potential sources of unaccounted mortality and, where practicable, estimate their magnitude and impact upon the management of the relevant fisheries. Building upon the work of previous Study/Topic Groups, this group will continue to review our current understanding of these potential sources of mortality and, in particular, identify reliable estimates of their magnitude.
	Term of Reference c). One potential source of unaccounted mortality, escape mortality from towed fishing gears, has attracted particular attention over the past decade, in terms of experimental investigations and observations. This is clearly a complex and technically demanding subject to investigate and as such a variety of techniques have been employed by various researchers. However, there is little standardisation of these techniques and there has been recent criticism of the accuracy of the estimates of escape mortality they have produced. This group will review the techniques used to investigate escape mortality, it will identify potential sources error and, if practicable, produce guidelines for the standardisation of future protocols.
Resource requirements	The research programmes which provide the main input to this group are already underway, and resources already committed. The additional resource required to undertake additional activities in the framework of this group is negligible.
Participants	There are a number of scientists active in this area, including some of the present members of WGFTFB.
Secretariat facilities	None
Financial	None
Linkages to other Groups or Committees	WGFTFB
Linkages to Advisory Committees	Work is of direct relevance to issues being dealt with in ACE and ACFM
Linkages to other organizations	FAO would be interested in outcome.
Cost Share	ICES 100%

2G06 A **Study Group on Regional Small Pelagic Fish** [SGRESP] will be established (Co-Chairs: Pierre Petitgas, France and Leonie Dransfeld?, Ireland) and will meet in France (Nantes) from 23-26 February 2004 to:

- a) assemble existing data on life history stages (adult, egg, larvae, juvenile) of pelagic fish (horse mackerel, mackerel, sardine, anchovy, herring and sprat) in ICES waters, regionally;
- b) characterise habitats of life cycle stages (spawning, nursery, feeding grounds), their inter-annual changes, their inter-species overlap;
- c) review existing relationships with physical and biological environmental indicators;
- d) produce and deliver to assessment Working Groups integrated environmental and ecological information relevant to the evaluation and prediction processes;
- e) consider a scientific plan to set up a working group on environmental forcing on small pelagics as well as propose a framework articulating the group with existing LCR groups on surveys methods and fish ecology and ACFM groups on assessment
- f) evaluate applicability of GLOBEC/SPACC findings to small pelagic stocks in ICES waters and establish contact between the SG work and GLOBEC/SPACC research

SGRESP will report by 31 March 2004 for the attention of the Living Resources Committee, ACFM, and ACE.

# **Supporting Information**

Priority:	The work of the Group is essential if ICES is to progress the understanding of
1101109.	environmental forcing on life history, spatial and population dynamics of
	pelagic fish to provide alternative basis to management on stocks recognised to
	fluctuate under environmental forcing.
Scientific	Present Study Groups and Planning Groups of LRC consider survey methods
Justification and	and tools for a variety of surveys on small pelagics in ICES areas (eggs, larvae,
relation to Action	acoustics, aerial). On the other hand, assessment WGs of ACFM cannot deal
Plan	with data integration although they consider that small pelagic stocks fluctuate
	under environmental forcing. The purpose of the SG is i) to integrate various
	survey data together as well as with meteo, satellite, fishery and/or ecosystem
	model outputs and ii) feed in the assessment WG with synthetic understanding
	of how the spatial dynamics of the biological cycle and the stock dynamics are
	related to the ecosystem thus increasing ICES ability to use ecological
	information in assessment and prediction of small pelagics. The SG will work
	on different case studies in the ICES waters.
Resource	No specific resource requirements beyond the need for members to prepare for
Requirements:	and participate in the meeting.
Participants:	These would include scientists working in WG MHSA, scientists performing
	egg and acoustic surveys as well as scientists in population modelling,
	environmental change and scientists participating to GLOBEC/SPACC.
Secretariat	None specific
Facilities:	
Financial:	None specific
Linkages To	link with ACFM through WG MHSA
Advisory	
Committees:	
Linkages To other	The Group will deliver products to the WG MHSA
Committees or	It will take data from PG on egg, aerial and acoustic surveys. HAWG.
Groups:	
Linkages to other	widened participation for this group will be sought including
Organisations:	GLOBEC/SPACC and relevant academic science
Secretariat Cost Share	ICES 100%

# 2H01 A Study Group on Baltic Sea Productivity Issues in support of the BSRP [SGPROD] (Chair: Bärbel Müller-Karulis, Latvia) will be established and will meet in Riga, Latvia from 29–31 October 2003 to:

- commence a summary of the evidence for links between land-based nutrients inputs and long-term changes of both productivity and biodiversity in eutrophied areas of the Baltic Sea;
- commence development of a system of indicators that characterize productivity at different trophic levels in the Baltic Sea that are important to ecosystem-based management taking into account the work already undertaken by ACE and the EEA;

establish an inventory of available productivity data and characterize their use;

identify information gaps along important trophic transfers in the Baltic Sea ecosystem;

- study the feasibility and efficiency of automated methods for productivity data collection (e.g. satellite imagery, ships of opportunity, profiling instrument platforms etc.), in collaboration with BOOS;
- recommend measures to adapt the existing measurement programmes to improve the assessment of Baltic Sea productivity within the framework of ecosystem-based marine management;
- prepare a workplan, including a schedule for deliverables, in cooperation with the other BSRP Groups; including considerations of potential contributions to 2006 Theme Session on Regional Integrated Assessments

SGPROD will report by 30 November 2003 for the attention of the Baltic Committee

Priority	Productivity is one of the four key elements of the ecosystem approach concept on marine systems; hence it represents one of the important work directions in the Baltic Sea Regional Project (BSRP). It provides information on the effects of eutrophication for ecosystem-based assessment and, moreover, characterizes the trophic structure of the biological system, allowing conclusions on the carrying capacity and stability of the Baltic Sea ecosystem. In order to meet the requirements of the BSRP Project Implementation Plan, productivity has to be integrated into ecosystem-based marine management.
Scientific Justification and	Action Plan:
relation to Action Plan	$\begin{array}{l} 1.2.1 - a \\ 2.2 - b \\ 1.7 - c \\ 1.12 - d \\ 1.10 - e, f, g \\ 5.6 - all \end{array}$
	The Study group will provide scientific advice to the Productivity Coordination Centre, Component 1 of BSRP, in order to establish the role of productivity in an ecosystem-based approach to marine assessment and management, to assess data needs and efficient data collection strategies, as well as to identify existing data on Baltic Sea productivity.
	Currently, Baltic Sea productivity-related data are collected at several separate trophic levels (primary production, phytoplankton, meso-zooplankton, macrozoobenthos, phytobenthos, and fish biomass). These data are only rarely interpreted in the context of trophic interactions.
	Within the Baltic Sea Regional Project (BSRP) the current system of productivity data collection should be evaluated. Indicators have to be developed that allow following material and energy flows from producers to consumers, including also abiotic resources necessary to primary producers. The stability of these flows with respect to external disturbances should to be assessable from the indicator system.
	So far, productivity data have been collected mainly based on organism size, habitat type or taxonomic entity. The existing data should be analysed with respect to functional groups of organisms, fulfilling specific functions within trophic flows in the Baltic Sea. Gaps where the current data do not cover relevant pathways should be identified and adaptations to the data collection and analysis strategy should be recommended.
	During the past decades, novel automated techniques for the collection of productivity information have become available, for example automated samplers, environmental

	<ul> <li>data-collecting systems on ships of opportunity, stationary or mobile profiling instrument platforms, automated plankton recorders, and the use of remotely sensed data. The use of these techniques in collecting marine productivity data should be evaluated and the need for unified standards within the Baltic Sea region should be addressed.</li> <li>The Baltic Sea looks back on a long tradition of environmental monitoring. Existing measurement programs therefore benefit from long-term data series and detailed scientific knowledge of the sub-area sampled. Adaptations towards a more ecosystem-based approach to Baltic Sea management should therefore strongly be based on the existing measurement programmes.</li> <li>Provisional workplan for 2004-2006 is as follows:</li> </ul>	
	<ul> <li>2004</li> <li>Review of available literature, data and current research results on productivity and trophic transfers in the Baltic Sea</li> <li>Present results as a theme session at a research conference by the end of 2004 and publish results as ICES research report or research journal issues</li> <li>Study group meeting: Assess the importance of individual trophic transfers, first draft of a system of indicators</li> <li>Inventory of existing productivity data will be established by the productivity</li> </ul>	
	<ul> <li>coordination center by mid 2004 and results will be presented to the study group members.</li> <li>2005 <ul> <li>Mid 2005: Study group meeting</li> <li>Design of an indicator system to assess Baltic Sea productivity</li> <li>Publish results as a research paper</li> <li>Assess available measurement methods, especially with regard to modern automated techniques</li> <li>Provide training opportunities for participants from the Eastern Baltic region</li> <li>End 2005: Study group meeting</li> <li>Compare proposed indicators to existing information as shown by the data inventory</li> <li>Recommendations for the upgrade of existing monitoring systems</li> </ul> </li> <li>2006 <ul> <li>Publish recommendations for the design and upgrade of the existing productivity monitoring system as ICES research report</li> </ul> </li> </ul>	
	Monitor the implementation of the recommendations	
Resource Requirements: Participants:	NoneParticipants should be scientists primarily but not exclusively from the Baltic area, with experience in productivity issues.Members of WGPE who overview similar issues in a more global framework should be involved where appropriate.	
Secretariat Facilities:	None	
Financial:	BSRP cover 2 members /eastern Baltic country	
Linkages to Advisory Committees:	ACE, ACME. In the consideration of indicator issues, the group will closely follow the guidelines prepared by ACE.	
Linkages to other	BEWG, SGGOOS, PGIBSRP(?), WGMDM, WGPE, WGSAEM, WGZE, the other	
Committees or Groups:	BSRP Study Groups	
Linkages to other Organisations:	HELCOM	
Secretariat Cost share:	BSRP 100%	

2H02 A **Study Group on Baltic Ecosystem Health Issues in support of the BSRP** [SGEH] (Chair: E. Andrulewicz, Poland) will be established and will meet in Gdynia, Poland from 10–13 November 2003 to:

- prepare a review of developments regarding ecosystem-based approaches to the monitoring, assessment and management of fisheries and the marine environment, with particular reference to progress in ICES, HELCOM, OSPAR and the North Sea Conference process, keeping in mind the aim of establishing and implementing the ecosystem approach in the Baltic Sea;
- further develop the concept of an ecosystem approach particularly adapted to Baltic Sea needs and applications, including at the coastal sub-systems levels, as appropriate for the aims of the BSRP and taking into account work already done in ICES;
- elaborate a scheme for the delivery of research and scientific advice for ecosystem-based management in the Baltic Sea area, that is timely and user friendly:
  - i) involving: the development and application of a system of ecological indicators and related reference points reflecting the objectives, constraints and state of key elements of the ecosystem in a coherent picture; and
  - ii) supported by the application of appropriate conservation measures necessary to protect threatened or vulnerable species and habitats.
- b) prepare a workplan, including a schedule for deliverables and a description on how the Group will address the human dimension related to these issues, in cooperation with the other BSRP Groups and including considerations of potential contributions to 2006 Theme Session on Regional Integrated Assessments.
- c) discuss and propose a strategy for implementing the development of a habitat classification framework and habitat maps for the Baltic Sea (in collaboration with WGMHM) [HELCOM 2004]

SGEH will report by 15 December 2003 for the attention of the Baltic Committee

Priority	Ecosystem-based assessment and management in the Baltic Sea has been identified as an important issue by the Baltic Sea Regional Project (BSRP). In order to meet the requirements of the BSRP PIP (Project Implementation and Procurement Plan), an ecosystem health concept for the Baltic Sea must be developed and offered to managers in order to ensure sustainable management.
Scientific Justification and relation to Action Plan	Action Plan:
	2.2 – a, b, c
	2.2.1 – a, b, c
	4.11 – a, b, c, d
	4.11.3 - c, d
	4.11.4 – c, d
	5.6 – all
	The traditional approach in the assessment and management of the Baltic Sea is based mainly on the assessment of water and sediment quality. Thus the structure and function of the whole Baltic ecosystem as well as ecosystem health is not covered sufficiently. At present, there are not even any appropriate scientific tools available to use in ecosystem health assessment.
	When developing the concept of ecosystem health, the following issues should be included:
	Identification of natural sub-systems in coastal areas
	• Monitoring the biological effects of eutrophication, contamination and fisheries
	Ecological Quality criteria for assessing ecosystem health
	• Environmental Reference Systems (including reference values, historical reference points and reference areas)
	Classification lists of endangered species for different Baltic sub-regions
	• Update and continue developing existing biotope/habitat classification (in collaboration with WGMHM)
	Biological diversity (including xenodiversity/invasive species)

Nature conservation areas [including management/protection plans]
• Effects of pollution on the functioning and structure of the ecosystem
Multiple Marine Ecological Disturbances (MMED)
The implementation of this concept will require decision-maker- friendly tools [practical approach] including decision-maker- friendly assessments; therefore it will be necessary to develop a scheme for providing timely and "user friendly" advice to management. This should be done through developments of DPSIR Indicators/Indices, Quality scoring/classification systems and Ecological Quality Objectives (EcoQOs).
The ecosystem-based approach concept [ecosystem health concept] as well as appropriate management tools should be developed and offered to Baltic Sea management.
Participants should be scientists primarily but not exclusively from the Baltic area, with experience in monitoring and assessments. Scientists with a broad knowledge of ecology systems, scientists with a strong interest in socio-economics and its applications)
All Baltic countries specifically should provide relevant experts, and also participants from outside of the Baltic region.
Members of WGPE who overview similar issues in a more global framework should be involved where appropriate.
BSRP covers costs of 2 member/eastern Baltic country
ACE, ACMP. In the consideration of indicator issues, the group will closely follow the guidelines prepared by ACE.
MHC, WGECO, WGMHM, WGEXT, MCWG, WGITMO, SGBOSV
HELCOM, OSPAR, IBSFC, EEA, IMO, IUCN, Agenda 21, BMB
BSRP 100%

- 2H03 A **Study Group on Baltic Ecosystem Model Issues in support of the BSRP** [SGBEM] (Chair: Wolfgang Fennel, Germany) will be established and will meet in Warnemünde, Germany from 12–14 January 2004 to:
  - analyse the scientific basis of ecosystem and fishery models of the Baltic and explore possible connections of them in future generations of Baltic Sea models and taking into account work already done in ICES;
  - define needs for data to initialise and validate models and identify gaps in process descriptions to stimulate targeted measurements and taking into account work already done in ICES;

recommend variables included in the BSRP - monitoring to support future modelling activities;

prepare a workplan, including a schedule for deliverables, in cooperation with the other BSRP Groups and including considerations of potential contributions to 2006 Theme Session on Regional Integrated Assessments.

SGBEM will report by 29 February 2004 for the attention of the Baltic Committee.

Priority:	The BSRP aims at improvement of infrastructure for science driven monitoring. The data are needed for assessment and modelling. To support future generations of models of the Baltic Sea the requirements for data set needs to be defined in order to make best use of the invested funds.
Scientific justification and relation to Action Plan	Action Plan: 1.2 -a 1.3 - b 1.5 - all 1.12 - b 5.6 - all

	Ecosystem models of the Baltic covering the food web from nutrients to zooplankton. The top down control is truncated and parameterised in terms of mortality. These models are able to deal with eutrophication and HAB issues. Fishery models ignore widely the bottom up effects. A first step to link ecosystem models and fish aspects is addressed in larvae drift models.
	Future generation of models can be envisaged which link bottom up and top down controls.
Resource requirements:	The BSRP will provide all necessary resources so far as the eastern Baltic countries are concerned.
Participants:	Participants should be scientists primarily but not exclusively from the Baltic area, with experience in modelling ecosystems or fish stock dynamics, and scientists with strong interest to interact with modelling.
	All Baltic countries specifically should provide relevant experts, and also participants from outside of the Baltic region.
	Members of SGPBI who overview similar issues in a more global framework should be involved where appropriate.
Secretariat	N/a
Financial:	BSRP covers costs of 2 member/eastern Baltic country
Linkage to advisory committees	ACE
Linkage to other Committees or	Strong linkage to the SGPBI
Groups	SG for implementation of the Baltic GEOHAB, the other BSRP Study Groups
Linkage to other organisations	BOOS
Secretariat Cost Share	BSRP: 100%

- 2H04 A **Study Group on Baltic Fish and Fisheries Issues in the BSRP** [SGBFFI] (Chair: Maris Plikshs, Latvia) will be established and will meet in Riga, Latvia from 3-5 February 2004 to:
  - k) review existing knowledge on environmental processes affecting fish stock dynamics in both the open sea and coastal areas of the Baltic;
  - determine those oceanographic processes and their temporal and spatial variability in the Baltic that influence the distribution and productivity of the fish, including consideration of open sea-coastal interactions;
  - m) suggest ways to integrate the above mentioned processes into enhanced assessment models for commercial fish stocks and new models of coastal fish community structure (in collaboration with SGMAB);
  - n) prepare a workplan, including a schedule for deliverables, in cooperation with the other BSRP Groups, including considerations of potential contributions to 2006 Theme Session on Regional Integrated Assessments.

SGFFI will report by 28 February 2004 for the attention of the Baltic Committee and ACE.

Priority:	A GEF-World Bank funded project ("Baltic Sea Regional Project" BSRP) on improving the marine
	ecosystem research infrastructure of eastern Baltic countries started in march 2003 with the ICES
	Secretariat responsible for hosting component 1, the Large Marine Ecosystem Activities of the
	project. In order to support these mechanisms and procedures must be put in place in order to
	incorporate and integrate these new activities into the ICES structure, and provide an interface with
	existing ICES activities.

Scientific	Action Plan:
Justification and relation to Action Plan	<ul> <li>1.2 - b</li> <li>1.3 - a, b</li> <li>1.6 - c</li> <li>1.12 - d</li> <li>3.5 - c</li> <li>5.6 - all</li> </ul> An improved linkage between scientific activities within physical, chemical and biological oceanography as well as fish stock assessment is a pre-requisite for the ICES Strategic Plan and BSRP goals of developing and implementing a holistic approach to ecosystem and fisheries management in the Baltic. This Group provides an essential interface with the Study Group on Multispecies Assessments in the Baltic. Its terms of reference are specifically part of the Implementation plan for Component 1 of the BSRP.
Resource	The BSRP will provide all necessary resources so far as the eastern Baltic countries are concerned.
Requirements:	
Participants:	All Baltic countries specifically should provide relevant experts, and also participants from outside of the Baltic region.
Secretariat	None
Facilities:	
Financial:	BSRP will pay participations costs of 2 members for each of the eastern Baltic states.
Linkages To Advisory Committees:	ACE, ACFM
Linkages To other Committees or Groups:	SGMAB, WGBIFS, WGBAFS, WGBITS, SGSSR, the other BSRP Study Groups
Linkages to other Organisations	HELCOM, IBSFC
Secretariat Cost Share	BSRP 100%

# 2101 **A Study Group on the By-catch of Salmon in Pelagic Trawl Fisheries** [SGBYSAL] will be established (Chair: Marianne Holm, Norway) and will meet at Bergen, Norway from 9-12 March 2004 to:

- a) work with WGMHNSA to disaggregate data on the commercial catches of mackerel and herring in the Norwegian Sea (ICES Divisions IIa and Vb), Northern North Sea (Division IVa), and the west of Ireland and Scotland (Divisions VI a & b; VII b,c,j & c) by ICES Division and standard week;
- b) work with WGMHNSA to disaggregate data on the number of boats and gear types used in the commercial fishery of mackerel, herring and horse mackerel in the Norwegian Sea (ICES Divisions IIa and Vb), Northern North Sea (Division IVa), and the west of Ireland and Scotland (Divisions VI a & b; VII b,c,j & k) by ICES Division and standard week;
- c) provide estimates of the by-catch of Atlantic salmon in the mackerel and herring fisheries in the Norwegian Sea with measures of their reliability;
- d) explore analytical methods to allow catch rates of salmon in research surveys to be extrapolated to catch rates in commercial fisheries;
- e) review methods used for intensive screenings of pelagic research hauls for the presence of post-smolts (small salmon in their 1<sup>st</sup> year at sea, generally < 45cm) and older salmon.

SGBYSAL will report by 31 March 2004 for the attention of the Diadromous Fish Committee, the Living Resource Committee, and ACFM.

Priority:	The work of the Study Group is essential if ICES is to satisfactorily respond to NASCO's
	request for scientific advice
Scientific	Action Plan: 3.16, 3.17, 5.7
justification and	
relation to Action Plan	NASCO has asked ICES to 'provide estimates of by-catch of salmon in pelagic fisheries and advise on their reliability' for its meeting in June 2004. NASCO has highlighted the potential by-catch of salmon post-smolts in this fishery as one of their highest priorities for further investigation, and this is at least the third time that a request of this sort has been made. In 2002, WGNAS made preliminary estimates of the by-catch which were included in ICES' advice to NASCO, but in 2003 this advice was heavily qualified, such that no estimate was provided. However, NASWG also made a number of recommendations to seek additional detailed information on the trawl fisheries. Unfortunately these requests were not passed on to PGNAPES in time for their meeting in Sept 2003 and so, without this SG, it will not be possible to answer NASCO's request until 2005 at the earliest (2 years after it was asked).
	<ul> <li>Tors:</li> <li>a) this is to improve our understanding of the overlap between these fisheries and migrating salmon.</li> <li>b) to provide information onn the size of catches by area and time.</li> <li>c) to assess the impact on salmon stocks</li> <li>d) to provide a better basis for assessing levels of by-catch.</li> <li>e)this is with the view to improving methods in order to provide better assessments</li> </ul>
Resource requirements:	Members to prepare for and participate in meeting
Participants:	Participation will be required by appropriate members of the NASWG and the PGNAPES (particularly Norway and Russia)
Secretariat facilities:	This group will have only modest computing and secretarial requirements
Financial:	NASCO makes financial contribution for this advice.
Linkages to	A close link to ACFM
Advisory	
Committees	
Linkages to other	This has been highlighted in the ICES Action Plan as an important issue that crosses the
Committees or	boundary between DFC and FTC
Groups	The report of this Group will be provided to WGNAS.
Linkages to other	Directly linked to request for advice from NASCO
Organizations	
Secretariat Cost Share	ICES:100%

2102 A Study Group on the Status of Diadromous Fish Species [SGSDFS] (Chair: Niall Ó Maoiléidigh, Ireland) will be established and will work by correspondence in 2004 to:

- a) examine the existing information on:
  - i) distribution of diadromous fish species in ICES areas;
  - ii) the status of these species;
- b) report the current status of each of these species;
- c) provide information on current threats faced by these species.

SGSDFS will report by 1 September 2004 for the attention of Diadromous Fish Committee, Living Resources Committee, ACFM and ACE.

Priority:	At the first meeting of the Committee in 2002, it was agreed to establish
	"baseline" status report on all diadromous fish in response to the query on the
	scope and diversity of species which should be handled by the Committee.

Scientific Justification and relation to Action Plan	Action Plan 1.9
	The distribution and status of many diadromous fish species is poorly known. A number of these species are protected under the Bern Convention, European Habitats Directive and CITES. In 2002, WGFC provided a review of the status of 3 diadromous fish species (Sea lamprey <i>Petromyzon marinus</i> , Houting <i>Coregonus laveratus oxyrhinchus</i> , and Allis Shad <i>Alosa alosa</i> ) not normally assessed by ICES in the context of the Texel-Faial Criteria for assessment of the conservation status of a number of sensitive fish species. This structure and procedure will be adopted by the Study Group for reporting the status of a wider range of diadromous fish species including threatened and endangered species.
Resource Requirements:	None
Participants:	Key workers on diadromous fish species from the North Atlantic Area
Secretariat Facilities:	
Financial:	Financed by home countries
Linkages to Advisory Committees:	ACFM, LRC, DFC, ACE
Linkages to other Committees or Groups:	WGFE
Linkages to other Organisations:	
Secretariat Cost Share	ICES 100%

- 2ACFM21 A Workshop on Sampling and Calculation Methodology for Fisheries Data [WKSCMFD) (Chair: Joël Vigneau, France) will meet in Nantes, France for 3 days in January 2004 to:
  - a) produce guidelines for routine estimation of precision in connection with national sampling programmes.
  - b) identify data requirements and appropriate sampling strategies and methods (e.g. stratification, mandatory and optional variables, selection of vessels, gears, etc.)) to collect fisheries data which fulfils requirements related to stock assessment;
  - c) compile information on and review the statistical procedures implemented within the National sampling programs (length, age and other biological parameters);
  - d) propose methods to estimate precision and design sampling stratification schemes that will minimise bias and maximise precision;

WKSCMFD will report by January 31 2004 for the attention of ACFM

Priority:	The Workshop will produce a guideline document for the routine estimation of precision and should furthermore identify appropriate sampling stratification in order to minimise bias and maximise precision of essential basic data for stock assessment purposes.
Scientific Justification and relation to Action Plan:	Fisheries advice critically depends on the quality of data from the commercial fisheries. The quality of these data has not in all cases be satisfactory and ICES and other organisations have raised this point repeatedly, e.g. in the introduction to the ICES ACFM report. The meeting is based on the following needs:
	a) It is becoming apparent that work needs to be done to encourage standardisation of sampling of commercial catches, discards and biological information.
	b) To standardize sampling methodology and methods for estimation of precision on sampled data.
	c) To identify appropriate sampling stratification schemes in order to minimise bias and maximise precision of fisheries data collection
	Exchange of experience with scientists from the Mediterranean will again in 2004 be furthered by this meeting.
Resource Requirements:	None
Participants:	Experts in statistics with experience in stock assessment input data. App. 8-10 participants
Secretariat Facilities:	None
Financial:	
Linkages to Advisory Committees:	ACFM, ACE
Linkages to other Committees or Groups:	Most Assessment Working Groups It will report to PGCCDBS

Linkages to other Organisations:	GCFM, CIESM, FAO
Secretariat Cost Share	ICES 100 %

# 2ACME06 A Joint ICES/OSPAR Workshop on Integrated Monitoring of Contaminants and their Effects in Coastal and Open-Sea Areas [WKIMON] (Co-Chairs: K. Hylland, Norway, and R. Law, UK) will meet at ICES Headquarters in 10-13 January 2005 to:

- a) develop guidelines for integrated biological effects and chemical monitoring, including:
  - i. specific guidelines for the integration of chemical and biological effects techniques with special emphasis on those parameters that have become mandatory in the OSPAR Coordinated Environmental Monitoring Programme;
  - ii. guidelines towards integrated chemical and biological effects monitoring for the entire range of issues in the OSPAR Joint Assessment and Monitoring Programme.

# WKIMON will report to the ACME and the Marine Habitat Committee **Supporting information:**

Priority:	High
Scientific Justification and relation to Action Plan:	This is in response to an OSPAR request. It is expected that the Workshop will be held at ICES Headquarters from 10–13 January 2005
	The guidelines will include
	1) specific guidelines for the integration of chemical and biological effects techniques with special emphasis on those parameters that have become mandatory in the OSPAR Coordinated Environmental Monitoring Programme;
	<ul> <li>2) guidelines towards integrated chemical and biological effects monitoring for the entire range of issues in the OSPAR Joint Assessment and Monitoring Programme.</li> <li>4.6</li> </ul>
Resource Requirements:	
Participants:	Experts in relevant fields from the ICES and OSPAR areas will be invited to participate.
	Participants in the workshop should include selected experts from WGBEC, MCWG, WGMS, WGPDMO, WGSAEM, in addition to experts from OSPAR.
Secretariat Facilities:	The Secretariat will be involved as normal in general professional and secretarial support, and the Secretariat should provide direct assistance during the workshop. The Secretariat might provide web space for the proceedings.
Financial:	
Linkages to Advisory Committees:	ACME
Linkages to other Committees or Groups:	MHC, MCWG, WGBEC, WGMS, WGPDMO, WGSAEM
Linkages to Other Organizations:	OSPAR
Secretariat Cost Share:	OSPAR:100%

# 2B07

A Workshop on Survey Design and Data Analysis [WKSDDA] (Co Chairs P.G Fernandes, UK and M Pennington, Norway) will be held in Aberdeen UK, in late May or early June 2004 to:

- a) review methods of designing and analysing fisheries surveys.
- b) summarise the current methods used for survey design and analysis.
- c) investigate where there are similar design and analysis problems.
- d) identify areas of agreement and specific areas of work where progress could be made.
- e) prepare workplans for identified areas of development.
- f) investigate methods to deal with intercalibration studies of fishing gears and survey vessels

WKSDDA will make its report available by 31 July 2004 for the attention of the Fisheries Technology Committee and the Living Resources Committee and Resource Management Committees

PriorityHigh: There are a number of demands being made on surveys that have not been require past; changes to survey only based assessment, improved survey efficiency and tools, incorporation of new instrumentation, ecosystem monitoring. In addition there is a need against legal challenge to methodology and results. There is an urgent need to develop r surveys that meet today's demands and that are soundly based in science.Scientific JustificationThe objective is to provide a forum to determine the state of survey design and analysis wide range of fisheries surveys. To facilitate this it is necessary to explore areas where to 	l to protect
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<ul> <li>distribution</li> <li>with thing of insteries starteys. To international this infects in the end of the end end end of the end of the</li></ul>	there is ent. The groups. les and ogy for val, egg, YES
Relation to Action PlanProvide sound credible, timely, peer-reviewed, and integrated scientific advice on fisher management and the protection of the marine environment.	ry
Resource     No ICES resources       Requirements     No ICES resources	
Participants: Definitely UK, Norway, USA, Canada, France, and ideally all ICESsurvey groups.	
Secretariat None require above report compilation	
facilities	
Financial No specific funding from ICES	
Linkages to other Survey planning groups operate under LRC, Data is delivered by surveys is used by alm	nost all the
Committees or ICES assessment working groups and for aspects of eco-system monitoring	
Groups	
Linkages to other None organisations	

- 2C02 A Workshop on Future Directions in Modelling Physical-Biological Interactions [WKFDPBI] (Co-chairs: F. Peters, Spain, and C. Hannah, Canada) will be held in Barcelona, Spain from 8–9 March 2004 to:
  - a) review the current state of the art in several fields that require modelling physical-biological interactions and are relevant to ICES: e.g. fisheries recruitment, harmful algal blooms, eutrophication;
  - b) identify the key areas where model improvements are required.

WKFDPBI will report by 15 May 2004 for the attention of the Oceanography Committee.

# **Supporting Information**

Priority:	This workshop is an important information gathering activity for WGPBI as it develops its strategic plan.
Scientific	Activity 1.5 (modelling biological-physical interactions in the sea),
Justification an	Activity 1.1 (provide feedback about research needs),
relation to Action	Activity 1.2 (increase knowledge with respect to functioning of the ecosystem).
Plan	The Study Group on Modelling Physical-Biological Interactions (SGPBI) has been active for 3 years and has proposed conversion to a Working Group (WGPBI). As part of this conversion a strategic plan is being developed. This workshop will provide a forum for the discussion of the current generation of models and their strengths and weaknesses. The results of the workshop will be used to ensure that the WGPBI work plan is consistent with the needs of the community. The workshop will also enable WGPBI to establish lines of communication with modelling communities throughout ICES member countries. The four proposed themes of the workshop are: Fish stock recruitment, Harmful algal blooms/Eutrophication; Modelling approaches; and Ecosystem integration and questions of scale.
Resource	No specific resource requirements.
Requirements:	No specific resource requirements.
Participants:	Participants: This Workshop should attract 25-40 participants. This is expected to include some
i anteipants.	scientists from outside the regular ICES scientific community. We will invite participation from ICES Working Groups (and other ICES groups) with an interest in Physical/Biological Interactions (e.g. WGPE, WGZE, WGHABD, WGCCC, WKHABWATCH, PGNSP, SGGOOS) and from groups such as GLOBEC and PICES.
Secretariat	None
Facilities:	
Financial:	None
Linkages To	ACFM, ACE
Advisory	
Committees:	
Linkages To other	ICES-IOC Working Group on Harmful Algal Bloom Dynamics
Committees or	WGZE, WGRP, BSRP SG on modelling
Groups:	
Linkages to other	GEOHAB (IOC/SCOR), GLOBEC (IOC/SCOR), PICES
Organisations	
Secretariat Cost	ICES:100%
Share	

2C14 A Workshop on New and Classic Techniques for the Determination of Numerical Abundance and Biovolume of HAB-species – evaluation of the cost, time-efficiency and intercalibration methods [WKNCT] (Chair: O. Lindahl, Sweden) will be held in Kristineberg, Sweden from 22–28 August 2004 to:

- a) compare traditional methods for concentrating, preserving, and counting common HAB species using light microscope techniques;
- b) compare molecular probe-based methods for cell enumeration with the traditional techniques;
- c) make recommendations for further research and development efforts targeted at identified inaccuracies or deficiencies in the methods being evaluated;
- d) identify, where possible, a reference counting method against which other methods can be calibrated;
- e) assess the usefulness and cost efficiency of the available numerical methods in routine monitoring.

WKNCT will report by 30 August 2004 for the attention of the Oceanography Committee and the Baltic Committee

IOC (GEOHAB) will in invited to co-sponsor the Workshop

Priority:	ICES should take an active role in developing the implementation plan of the GEOHAB programme. The topic of intercalibration is relevant for GEOHAB and also fits well into ICES profile.
Scientific Justification:	Almost all HAB monitoring and dynamics studies are performed using classical techniques for determining abundance and biomass. New probe-based techniques show great potential for studying HAB dynamics and will make it possible to understand biological processes leading to HAB events. However, the validation of the new techniques is limited. Classic microscope techniques need to be compared with species and strain specific molecular probe methods as well as methods for preserving and concentrating phytoplankton. The goal is to produce scientifically based recommendations on choice of methodology for HAB-monitoring programmes.
	The Workshop will be conducted through laboratory exercises, presentations, and discussions:
Relation to Strategic Plan:	Implementation of the GEOHAB programme is relevant to the quantifying of human impacts on the on the marine ecosystem. The workshop will produce scientifically based recommendations on
Resource Requirements:	Conveners and lecturer's work time is required. Travelling and accommodation costs are needed for meeting participants. Laboratories, appropriate equipment and convenient access to coastal waters are required during the workshop. Technical support would be required for publication. It is intended that the proceedings of the workshop will be published in one or more formats. An editorial committee will evaluate the feasibility of publishing a technical report with contributions on the principal topics. This option will be pursued if a strong commitment from a lead editor is obtained and adequate resources are secured.
Participants:	Experts in relevant fields from around the world would be invited to participate.
Secretariat Facilities:	The Secretariat will be involved as normal in general professional and secretarial support, and the Secretariat should provide direct assistance during the workshop. The Secretariat might provide web space for the proceedings.
Financial:	Travelling support is needed for participants. Funds will be asked from IOC, EU, SCOR and other relevant organizations.
Linkages to Advisory	Harmful algal blooms are continuing issues in ACME.
Committees:	
Linkages to other Committees or Groups:	Support can be anticipated from the Baltic Committee, WGPE, SGGIB.
Linkages to Other Organizations:	GEOHAB is sponsored by IOC and SCOR.
Secretariat Cost Share:	ICES:100%

- 2D04 A Workshop on Advanced Fish Stock Assessment Techniques [WKAFAT] (Co-Chairs: D. Skagen, Norway; E. Hjorleifsson, Iceland; and L. Kell, UK) will be held at ICES Headquarters, from 3–10 March 2004 to:
  - a) teach a course covering stock assessment methodology, including evaluation of data consistency, estimation of the state of a stock, projection of stock status, uncertainty evaluation and risk assessment; and
  - b) present the open computing environment for fishery science and management currently under development within WGMG.

Participants will each pay a contribution of DKK 2000 towards the running expenses of the Workshop.

WKAFAT will report by 31 March 2004 for the attention of the Resource Management and Living Resources Committees, and ACFM.

Priority:	In order to maintain and improve the quality of ICES advice, continual education in new and modern modelling tools that take into account new scientific ideas is necessary. The training undertaken in this Workshop is essential for ICES to assure the quality of the ICES advisory function and of its fish stock assessments in the longer term.
Scientific Justification and Relation to Action Plan:	The Workshop on Fish Stock Assessment Techniques [WKCFAT] has been running over the past few years and has served a useful purpose. However, there is now an urgent requirement for ICES to broad the scientific basis of the models that its employs for fish stock assessment. This new Workshop on Advanced Fish Stock Assessment Techniques [WKAFAT] will replace the previous course WKCFAT and should address this by providing a more ambitious and intellectually demanding course. The course in 2004 will provide basic training in stock assessment methods as currently practiced by ICES but also introduce the participants to a number of modern developments. RMC proposes TOR a) and b): ToR a) – The first two Co-chairs will teach a basic course but introduce the newer model developments being employed within NWWG and the WGNPBW, for example. New developments in the field such as statistical catch-at-age/length, data limited models, production models, CSA and delay-difference models should be in routine use within the ICES assessment toolkit but experience with these models is currently limited. In addition, principles of error estimation such as bootstrap procedures, Bayesian methods and stock synthesis need to be disseminated more widely within ICES. The emphasis needs to be on teaching principles underlying methods rather than 'button pushing' of standard software tools. The Co-chairs will present a selection of stock assessment modelling approaches during the course. The feasibility of teaching both on-line and by conventional class instruction needs to be explored. The previous syllabus adopted by WKCFAT needs expanding and in the future participants will need instruction in the new open computing environment being advocated by RMC; together with instruction in the use of tools to investigate management procedures for stock recovery and to evaluate harvest control rules. To Co-chair based upon R and the participants of this Workshop will be instructed in its features. It is envisaged that this tool, or something similar,
	and advisory processes in the future. In general, the remit of this group addresses Action Number 4.10 & 6.7.3.
Resource Requirements:	Secretariat will need to put a substantial amount of work on this task.
	It is envisaged that the first two Co-chairs will attend the whole Workshop but

	that the third Co-chair will only attend for the last two days.
Participants:	<ol> <li>Ideally, there will be about 24 participants but at most 30 participants.</li> <li>Each member and observer country can announce at most 3 participants. The order in which they are presented should indicate the priority of the country. These participants should be announced before 10 Dec 2003.</li> <li>Each member country will have one participant guaranteed.</li> <li>Any left over places (at least 5) will be distributed by 1 participant per country. If it is not possible to accommodate all participants then the chair of RMC together with the Co-chairs will establish a priority list. In their judgment they will consider the involvement with ICES fish stock assessment of the participants as the prime criteria. This involvement will be both present members and announced (new) members of assessment WGs.</li> <li>The Secretariat will announce participation by 20 December 2003.</li> <li>An indication of the ICES stock assessment WG to which the participant will be nominated after training should be provided, together with a possible time-scale (i.e. once trained, will a participant attend a WG in 2004, 2005,).</li> </ol>
Secretariat Facilities:	Meeting facilities
Financial:	<ul><li>Funds are required from outside. The Co-chair from Iceland is investigating the feasibility of obtaining grant monies from the Nordic Council.</li><li>Participants will each pay a contribution of DKK 2000 towards the running expenses of the Workshop. Last year's fee of DKK 1000 per participant did not fully cover the travel and substitence cots of the two UK lecturers.</li></ul>
Linkages to Advisory Committees:	ACFM
Linkages to other Committees or Groups:	
Linkages to other Organisations:	There is similar work going on within ICCAT and NAFO.
Secretariat Cost Share	ICES 100%

# Table 1

Lists of the various Working Groups, Study Groups, and other Groups and Workshops that were dissolved, established, or renamed by virtue of Council Resolutions at the 2003 Annual Science Conference.

Type of Action	Name
Dissolved	Study Groups
	ICES/IOC/IMO Study Group on Ballast and Other Ship Vectors [SGBOSV] – re-
	established as WG (ACME) Study Group on Modelling Physical/Biological Interactions [SGPBI] – re-established
	as WG (C)
	Planning Group on Redfish Stocks [PGRS] - re-established as SG (D)
	Study Group on the Revision of Data for North Sea Herring [SGREDNOSE]
	(ACFM) Study Group on Precautionary Reference Points for Advice on Fishery Management
	[SGPRP] (ACFM)
	Study Group on Biological Reference Points for Northeast Arctic Cod (SGBRP) (ACFM)
	Study Group on the Further Development of the Precautionary Approach to Fishery Management [SGPA] (ACFM)
	Planning Group on Implementation of the Baltic Sea Project [PGIBSRP] (H) Study Group on ACFM, ACE and ACME Working Group Working Protocols [SGAWWP] (MCAP)
	Study Group on Mesh Measurement Methodology [SGMESH] (B)
	Study Group on the Review of the Structure of the Fisheries Technology Committee
	[SGRSFTC] (B) Study Group for Phytoplankton and Protist Taxonomy [SGPPT] (C)
	Study Group on Herring Assessment Units in the Baltic Sea [SGHAUB] (H)
Established/Re-established	Working Groups
	ICES/IOC/IMO Working Group on Ballast and Other Ship Vectors [WGBOSV] (ACME)
	Working Group on Modelling of Physical/Biological Interactions [WGPBI] (C)
	Study Groups
	Study Group on Ecological Quality Objectives for Sensitive and for Opportunistic Benthos Species [SGSOBS] (ACE)
	Study Group to Review Ecological Quality Objectives for Eutrophication [SGEUT] (ACE)
	Study Group on Quality Assurance [SGQUA] (MCAP)
	Study Group on Collection of Acoustic Data from Fishing Vessels [SGAFV] (B)
	Study Group on Unaccounted Fishing Mortality [SGUFM] (B) Study Group on Assessment Methods Applicable to Assessment of Norwegian
	Spring Spawning Herring and Blue Whiting Stock [SGAMHBW] (ACFM)
	Study Group on Stock Identity and Management Units of Redfishes [SGSIMUR]
	(ACFM) Study Crown on Closed Snowning Among of Fastern Daltis Cod (SCCSA) (ACFM)
	Study Group on Closed Spawning Areas of Eastern Baltic Cod [SGCSA] (ACFM) Study Group on Ageing Issues in Baltic Cod [SGABC] (ACFM)
	Study Group for Long Term Advice [SGLTA] (ACFM)
	Study Group on Regional Small Pelagic Fish [SGRESP] (G)
	Study Group on Redfish Stocks [SGRS] (G) Study Group on Baltic Fish and Fisheries Issues in the BSRP [SGBFFI] (H)
	Study Group on Baltic Fish and Fisheries issues in the BSRP [SGBFFI] (H) Study Group on Baltic Sea Productivity Issues in support of the BSRP [SGPROD] (H)
	(H) Study Group on Baltic Ecosystem Health Issues in support of the BSRP [SGEH] (H)
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Type of Action	Name
	Study Group on Baltic Ecosystem Model Issues in support of the BSRP [SGBEM]
	(H)
	Study Group on the By-catch of Salmon in Pelagic Trawl Fisheries [SGBYSAL] (I)
	Study Group on the Status of Diadromous Fish Species [SGSDFS] (I)

# Workshops

Renamed	<b>Planning Groups</b> Planning Group on Surveys of Pelagic Fish in the Norwegian Sea [PGSPFN] will be
Danamad	Disaring Course
	Effects in Coastal and Open-Sea Areas [WKIMON] (ACME) Workshop on Survey Design and Data Analysis [WKSDDA ] (B) Workshop on New and Classic Techniques for the Determination of Numerical Abundance and Biovolume of HAB-species [WKNCT] (C) Workshop on Future Directions in Modelling Physical-Biological Interactions [WKFDPBI] (C) Workshop on Advanced Fish Stock Assessment Techniques [WKAFAT] (D) Workshop on sampling and calculation methodology for fisheries data [WKSCMFD) (ACFM)
	Joint ICES/OSPAR Workshop on Integrated Monitoring of Contaminants and their

Planning Group on Surveys of Pelagic Fish in the Norwegian Sea [PGSPFN] will be renamed the Planning Group on Northeast Atlantic Pelagic Ecosystem Surveys [PGNAPES] (D)

 Table 2

 The Council's attention is drawn to the following new Chairs of Advisory Committees, Working Groups, Study Groups, and other Groups and Workshops:

 Chairs

Chairs	Group
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	Working Groups
Norman Graham, Norway	ICES-FAO Working Group on Fishing Technology and Fish Behaviour [WGFTFB]
	(B)
Dave Demer, USA	Working Group on Fisheries Acoustics Science and Technology [WGFAST] (B)
C. L. Needle, UK	Working Group on the Assessment of Demersal Stocks in the North Sea and Stagarrak [WCNSSK] (ACEM)
Ciaran Kelly, Ireland	Skagerrak [WGNSSK] (ACFM) Working Group on the Assessment of Mackerel, Horse Mackerel, Sardine, and
Claran Keny, neland	Anchovy [WGMHSA] (ACFM)
M. Pastoors, The Netherlands	Working Group on Fishery Systems [WGFS] (D)
C. Hannah, Canada	Working Group on Modelling of Physical/Biological Interactions [WGPBI] (C)
Fransisco Rey, Norway	Working Group of Phytoplankton Ecology [WGPE] (C)
(Co-Chair)	
Michele Fichaut, France	Working Group on Marine Data Management [WGMDM] (C)
Helge Sagen, Norway	
J-C Mahe, France	International Bottom Trawl Survey Working Group [IBTSWG] (D)
S. Boyd, UK (Co-Chair)	Working Group on the Effects of Extraction of Marine Sediments on the Marine
	Ecosystem [WGEXT] (E)
	Study Groups
Steve Murawski, USA	Study Group on Assessment Methods Applicable to Assessment of Norwegian
	Spring Spawning Herring and Blue Whiting Stock [SGAMHBW] (ACFM)
Kjell Nedreaas, Norway	Study Group on Stock Identity and Management Units of Redfishes [SGSIMUR]
Hans-Harald Hinrichsen,	(ACFM) Study Group on Closed Spawning Areas of Eastern Baltic Cod [SGCSA] (ACFM)
Germany, and Fritz Köster,	Study Oroup on Closed Spawning Areas of Eastern Banc Cod [SOCSA] (ACTM)
Denmark	
Johan Modin, Sweden	Study Group on Ageing Issues in Baltic Cod [SGABC] (ACFM)
P. Degnbol, Denmark	Study Group for Long Term Advice [SGLTA] (ACFM)
Helen Dobby, U.K	Study Group on Age-length Structured Assessment Models [SGASAM] (D)
W. Karp	A Study Group on Collection of Acoustic Data from Fishing Vessels [SGAFV] (B)
Mike Breen, UK	Study Group on Unaccounted Fishing Mortality [SGUFM] (B)
K. Essink, The Netherlands	Study Group on Ecological Quality Objectives for Sensitive and for Opportunistic
	Benthos Species [SGSOBS] (ACE)
T. Smayda USA	Study Group to Review Ecological Quality Objectives for Eutrophication [SGEUT]
G. Ærtebjerg, DK	(ACE)
W. Waldock, UK	Study Group on Quality Assurance [SGQUA] (MCAP)
P. Petitgas, France	Study Group on Regional Small Pelagic Fish [SGRESP] (G)
L. Dransfeld, Ireland?	
(Chair: to be identified)	Study Group on Redfish Stocks [SGRS] (G)
L. Karlsson, Sweden	Study Group on Salmon Scale Readings [SGSSR] (H)
Maris Plikshs, Latvia	Study Group on Baltic Fish and Fisheries Issues in the BSRP [SGBFFI] (H)
Bärbel Müller-Karulis, Latvia	Study Group on Baltic Sea Productivity Issues in support of the BSRP [SGPROD]
E. Andrulewicz, Poland	Study Group on Baltic Ecosystem Health Issues in support of the BSRP [SGEH] (H)
Wolfgang Fennel, Germany	Study Group on Baltic Ecosystem Model Issues in support of the BSRP [SGBEM]
	(H)
Marianne Holm, Norway	Study Group on the By-catch of Salmon in Pelagic Trawl Fisheries [SGBYSAL] (I)
Niall Ó Maoiléidigh, Ireland	Study Group on the Status of Diadromous Fish Species [SGSDFS] (I)
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# **Steering Groups**

J. Davies, UK	ICES/OSPAR Steering Group on Quality Assurance of Biological Measurements in the Northeast Atlantic [SGQAE] (ACME)
	Planning Groups
B. Couperus, The Netherlands	Planning Group for Herring Surveys [PGHERS] (G)
	Workshops
K. Hylland, Norway, and R. Law, UK	Joint ICES/OSPAR Workshop on Integrated Monitoring of Contaminants and their Effects in Coastal and Open-Sea Areas [WKIMON] (ACME)
P. G. Fernandes, UK M. Pennington, Norway	Workshop on Survey Design and Data Analysis [WKSDDA ] (B)
O. Lindahl, Sweden	Workshop on New and Classic Techniques for the Determination of Numerical Abundance and Biovolume of HAB-species – evaluation of the cost, time- efficiency and intercalibration methods [WKNCT] (C)
F. Peters, Spain, and C. Hannah, Canada	Workshop on Future Directions in Modelling Physical-Biological Interactions [WKFDPBI] (C)
D. Skagen, Norway; E. Hjorleifsson, Iceland; and L. Kell, UK	Workshop on Advanced Fish Stock Assessment Techniques [WKAFAT] (D)
Joël Vigneau, France	Workshop on sampling and calculation methodology for fisheries data [WKSCMFD] (ACFM)