REPORT OF THE

Advisory Committee on Fishery Management

ICES Headquarters 9–17 October 2002

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International Council for the Exploration of the Sea

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1 MINUTES 9 OCTOBER 2002

The Chair Tore Jakobsen opened the meeting and welcomed the participants. He noted that there would be only a short plenum now and that the subgroups would start immediately after this plenum.

The Chair introduced a film team that would be filming during the ACFM cod discussions. The crew leader presented the intension to film some of the ACFM work. The film will be about cod.

Short description

A kaleidoscopic documentary about cod: a film focusing on the cod's life cycle in the sea and on the people living off cod, the fishermen and their families, biologists who examine the conditions of the various strains and the behaviour of cod, the experimental cod farms in Norway, the civil servants negotiating the future of cod fishing, the politicians responsible for making key decisions, and the consequences of these decisions for the culture of coastal fishing.

We envision a film with a changing pace and dynamic cuts from one aspect to another. The fishermen. The civil servants. The cod in the sea. Biologists investigating cod behaviour. Large-scale industrial fishing. The cod's possible continued existence as a cage animal. The editing style will be energetic, and we picture a model where we cut during a highlight in one theme to preserve that energy and carry it on to the next theme.

Archive photographs from the heyday of cod fishing in the beginning of the 20th century and from the peak of industrial fishing in the 1960s will be inserted as uncommented vignettes where suitable.

To sum up, this will be a film about the prolific impact of cod on our entire culture, a film depicting cod's pervasive importance for our culture and an investigation into the political situation. But also a film going one step further attempting to depict the life of the cod at sea.

The film will be finished in about a year and there will thus not be any problems with leaking of information from the ACFM meeting to the public before the moratorium is over.

ACFM accepted that the film crew would work during the committee's session.

The Committee adopted the draft agenda, see annex I. Concerning the time schedule of the subgroups Carmela Porteiro proposed some changes because she wanted to be present at two meetings at the same time. This was, however, not possible due to other constraint in the program. The chair encouraged the Subgroup chairs to coordinate their work to minimise the conflicts. The subgroup on mixed fisheries and cod and hake recovery plans was moved from Friday 14-18 to Saturday morning.

The Chair outlined the tasks of the Sub-Groups. The WG Chair is responsible for the Tech. Min., the Sub-Group Chair for presentation in Plenary. It was decided to try to use the advice diagram as a rough guide to formulating the advice. A draft template for the Tech. Min. were distributed, see annex IV. Tore stressed that the Sub-Groups should not use the easy way out when encountering a problem, namely to postpone it to the Plenary, but they should try hard to come up with their best solution. It was agreed that Tore and the Secretariat should try to come up with a list of stocks that need not be raised in Plenary. The problem with mean weight-at-age and the best procedure was raised but it was agreed that the Sub-Groups should not try to correct the procedures used by the WGS, as long as these follows the previous standards. For the future the wgs and ACFM should consider this aspect in more details and consider results that may accrue from the SGGROMAT meeting 5–10 December 2002.

The Chair noted that the results of the Fishermen survey had been received and encouraged the WGNSSK and WGNSDS subgroup to take a close look on this information and relate the information to the assessment results.

The Plenum was then closed and work continued in subgroups.

This list of stocks not considered in Plenum was distributed in the afternoon.

Suggestions for stocks/sections that can be excluded from plenary discussions

Sub-groups may in consultation with the ACFM Chair add or delete stocks.

WGNSSK:

Whiting in Division IIIa Sandeel in Division IIIa Norway pout in Subarea IV and Division IIIa Sandeel in Subarea IV Sandeel in the Shetland area

WGNSDS:

Anglerfish in Division IIIa Cod in Division VIb Whiting in Division VIb Saithe in Subarea VI Megrim in Subarea VI Norway pout in Division Via Sandeel in Division Via

WGSSDS:

Haddock in Division VIIb-k

WGHMM:

Sorry, no immediately obvious candidates

WGMHSA:

North Sea horse mackerel Anchovy in Division IXa

WGPAND:

Pandalus borealis in Division IVa (Fladen Ground) *Pandalus borealis* in Division IVb (Farn Deeps)

2 MINUTES 10 OCT 2002

Plenary 9:00.

The Chair welcomed the EC observer.

Status of the Subgroup work.

WGNSSK far behind schedule due to the film crew and to difficulties reaching consensus about the stock summaries. One day extra is needed. It was decided to stick to the time schedule and let a small group continue with WGNSSK on the side line, like done last year.

The film crew slowed things down due to sub-group members apparent reluctance to come quietly forward with their interventions.

There was a problem with PC-projectors this afternoon when three groups are meting simultaneously and there are only two projectors available. The Secretariat will try to borrow one from the Castle.

Mixed fisheries needs documentations that are more easily digestible for the Sub-Group participants if the discussion shall be fruitful and constructive. The Secretariat promised to work on this and have something ready in the evening.

Work continued in subgroups.

3 MINUTES 11/10 2002 9:00-9:20

All Subgroups were more or less on schedule. The WGNSSK working on the sideline expected to be finished at lunch time.

The WGNSDS mentioned that the review was problematic as quite few experienced people were participating. This needs to be secured in the future.

The problem was raised again about the rules for selecting the \mathbf{F}_{sq} – shall it be a mean of the last three year scaled to the last year's F or what? There are no firm guidelines on this and it might be appropriate to try to formulate such guidelines.

Also the problem of when a forecast is too uncertain to be accepted for use in the advice was raised. When it is very dependent on guessed recruitment, is it then appropriate to use it? ACFM again came to the conclusion that this would depend on the stock status and in general be case specific.

Work continued in Subgroups.

4 MINUTES 12/10 2002 9:00-9:20

All Subgroups were more or less on schedule.

Barents Sea capelin. Tore, Denis and Yuri were working on this.

The inconsistencies in the F reference points table from the plotting program and the ones calculated by the WGS was mentioned, but if a detailed discussion was required it should be taken up Monday.

5 MONDAY 14 OCTOBER

The chair opened the meeting by welcoming Poul Degnbol, the incoming ACFM chair. Poul would be present as an observer to help him when he will become responsible for ACFM's work from 1 January 2003.

The meeting approved the Minutes of the ACFM consultations September 2002

The Chair drew attention to the list of requests and asked the Subgroup chair to pay close attention that all requests are being addressed as far as possible.

On Agenda point 5 Matters from ASC the Chair noted the changed timing of WGNSDS and WGNSSK. The Chair also noted the creation of a Fish Ecology WG. This working group might produce results that would be become directly relevant to ACFM. The Chair also noted that the [proposed SG on herring data for Celtic Sea was not approved. However, he had been informed that the work would be done through consultations between CEFAS (Lowestoft, UK), The Isle of Mann laboratory, The Northern Ireland Laboratory and the Irish (ROI) laboratory.

The Chair also reminded ACFM of the discussion of involving managers and industry in a process when ACFM had finalised its analysis of the PA reference points. He confirmed that ICES is committed to such a hearing round before the revision can be considered as finalised.

On agenda point 6 on the continued collaboration with the NSC FP there was a discussion on allowing observers to working groups and to ACFM. ACFM repeated its previous comments and stressed that the integrity of the committee is a concern; it is vital important to ACFM that the introduction of observers be done such that ICES still can produce advice "free from political influence and based on the best available scientific information". This is not only important that this independence can be clearly demonstrated to outsiders.

There were no comments to agenda points 7 and 8 apart from what was set in connection with the discussion on NSC FP.

Agenda point 9 on the ACFM working protocol and its Form of Advice. The Chair presented a proposal for revising the assessment procedure basing the future work on a benchmark-update system, see annex IV. The general background to the proposal is

- The working Groups need to be more focused in their work and this is important as the personnel resources become more and more scarce.
- There is not sufficient information in just one additional year of data for a stock that has been routinely assessed for say 20 years to revise the assessment model and its setting;

The proposal was extensively discussed. Jake Rice noted that Canada is moving in a similar direction. Wim Demare mentioned that WGSSDS on its own also was working in this direction.

It was noted that the review procedure should check that there is no indication that the assessment model is becoming invalid.

ACFM concluded that there is general support for the proposal in ACFM and that the WGs should be given a chance to comment.

Concerning agenda points 11 on Working and Study Group Reports the Chair reminded ACFM on the planned review of the reference points to take place in SGPA (Dec. 2002) and two working groups in January-February 2002.

Agenda 13 on Reports from meetings with Cooperative Organisations. The Chair drew ACFM's attention to a distributed paper on Multiannual management and advice that had been released by DG Fish on 8 October.

Agenda 14 ACFM Quality Management Procedures - Manuals and Handbook. The assessment scientist updated ACFM on progress. He noted that this work was an essential element that allowed ACFM in moving to the proposed Benchmark-Update system.

The Fisheries Adviser gave a brief status report on data system development. Norway had very generously contribute NKr 800 000 to this project and the Fisheries Adviser thanked Norway. There will be established a steering Group (chairs of WGNSSK, HAWG, WGMHSA and WGBFAS)

There was no comment under Any Other Business.

In closing the meeting the Committee thank Tore Jakobsen for steering it through three years. They wished him success in his new position that he would take up shortly in Brussels.

ANNEX I

ACFM OCTOBER 2002

Agenda

Advisory Committee on Fishery Management ICES Headquarters, 9-17 October 2002

Plenary Sessions 14-17 October 2002

- 1. Opening
- 2. Adoption of agenda and timetable
- 3. Approval of minutes of ACFM Consultations
- 4. Documentation and Requests for Advice
- 5. Matters from 2002 Annual Science Conference
 - a) ACFM recommendations
 - b) RMC recommendations and report
 - c) LRC recommendations and report
 - d) Symposia and theme sessions in the coming years
 - e) Theme session reports
- 6. North Sea Commission
- 7. MCAP report and Delegates' decisions
- 8. ACE report
- 9. ACFM Working protocols and Form of Advice
- 10. ACFM report
 - a) Format of the report
 - b) Introductory items
 - c) Table of contents
- 11. Working and Study Group Reports
 - a) SGPA
- 12. Preparation of Advice to Commissions and Member Governments

- 13. Reports from meetings with Cooperative Organisations
- 14. ACFM Quality Management Procedures Manuals and Handbook
- a) Status on data system development
- b) Progress on developing a handbook for WGs
- 15. Any Other Business
- 16. Closing

ANNEX II

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ICES Headquarters, 9 October – 17 October 2002

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ANNEX III

GUIDELINES FOR TECHNICAL MINUTES

To be used by ACFM sub-groups

By H. Sparholt

The Technical Minutes will from May 2002 and onwards be included as an annex to each wg report. Therefore, the text needs to be intelligible for persons outside ACFM, i.e. especially the WG members but also for the general "educated" public who wish to see what ICES have done. This is part of the ICES policy of transparency.

At the ACFM Consultations in Oslo September 2001 it was decided in this context to try to develop a template for the Technical Minutes for the use by ACFM sub-groups when reviewing assessments.

The following is a suggestion for how this can be done.

This is a simple template where the following points are checked and text only included in the Technical Minutes, if there is any comment, i.e. if the wg has done something wrong. If the error is made in for instance input data then of course all the following points need to be up dated and included in the Technical Minutes as well.

1	Have the wg answered the TORs?
2	Input data Are national data correctly summed to give international catch and are the SOP equal to landings? Have misreporting been dealt with in an acceptable way? Are discards included and used appropriately? Etc.
3	The assessment method (XSA, ICA etc.), is the settings/options and input data optimal, check diagnostics, retrospective pattern etc. If an assessment methods has been accepted the previous years then there should be strong reasons for changing it. Etc.
4	The short-term projection. Does initial stock numbers match survivors from VPA; are F and M before spawning in agreement with the VPA; Are weight-at-age correct; Are R for all years correct. Does exploitation pattern give status quo F; Are assumptions about current year catch OK. Etc
5	The medium-term projections. Does it fit with the short-term projection and the VPA survivors – and if not does it matter. Check especially that the S-R model used is appropriate. Etc
6	Consider the overall assessment including whether there is a need for a general change in method, data collection, surveys, mis-reporting estimation, discard estimation and data sampling, etc.
7	Check that the wg has responded to comments from the previous year given in the ACFM Technical Minutes.
8	Are the PA ref. points OK?

All revised VPA/XSA etc., short-, medium-term and long-term runs shall be fully documented.

ANNEX IV

REVISING THE ICES ASSESSMENT SYSTEM

ACFM

12 October 2002

A system with Full and Update Assessments

Each year ICES reviews the status about 150 stocks. There are analytical assessments for about 70 of these stocks. At present all stocks are assessed each year with the exception of *Nephrops* (17 stocks) and Deep water fish stocks (about 10 species) that are assessed every second year.

Presently the full structure of the assessments is thoroughly analysed by the WGs and sometimes changed every year. This may cause major problems for the Clients if it results in major changes in the perception of the state of the stock and is introduced without substantial documentation of the need for changes in the assessment. Therefore, ACFM needs to be restrictive in allowing changes and to have a strict policy ensuring that the necessary documentation and reviews are in place.

The workload of ACFM and its WGs is very high. In order to use the limited resources more effectively, a way forward is to replace the present system of equal attention to all stocks each year by focussing on selected stocks in a particular year and apply update assessments to the other stocks. By allowing more time to focus on a particular stock, it will be possible to undertake a more thorough analysis of the assessment.

In principle a procedure where stocks are subject to a full analysis at regular intervals could apply to all stocks. However, it is realised that there are stocks, e.g. under rebuilding, that requires more frequent full assessments. These stocks are placed on a special observation list, which is visited each year.

Proposal

Future fish stocks assessments in ICES will be structured according to the following principle:

- The ACFM report shall each year document the full range of stocks.
- Stocks are classified in two groups: those stocks that are under ordinary assessment procedures and those that are on an observation list.
- Stocks are placed on the observation list by ACFM. Both WGs and Clients can request ACFM to place a stock on the observation list. ACFM will at each meeting review this observation list. Criteria for having a stock on the observation list include *inter alia*: that the stock is subject to a rebuilding plan, is at very low level or that there are indications of major changes in the stock status from surveys or the fisheries.
- Stocks on the observation list are fully assessed every year.
- Stocks not on the observation list will be subject to a full assessment at least every 5 years. In other years the assessments will be of the update type.
- For stocks not on the observation list, ACFM will agree (based on a proposal from the WG) on the assessment specification. This specification includes the following
 - Choice of assessment model including settings of the model;
 - Compilation of the basic data for the model, e.g. catch-at-age, mean weights, maturity ogives;
 - Choice of surveys and commercial cpue series to be used in the assessment and procedures for deriving these indices;
 - Procedures for projection in the short and medium-term;
 - PA reference points;

A full assessment includes an analysis of the appropriateness of all elements in the assessment model described above. This analysis will be done by the assessment WG responsible.

An update assessment includes: updating all relevant time-series and using the agreed assessment model to update all calculations including short and medium-term forecasts as appropriate. Deviations can be accepted only if based on well documented evidence of a problem with the basis for the assessment model, e.g. that a prediction procedure becomes invalid.

Stocks on the observation list will be subject to a full assessment every year.

Assessments of stocks on the observation list will be reviewed by ACFM. When ACFM decides to place a stock on the observation list the following review of the assessment of this stock should involve an external reviewer. For stocks that remain on the observation list for a longer period, the review will only involve external reviewers at intervals of 3 years.

Update assessments of stocks not on the observation list will be reviewed internally by ACFM and the review will primarily only constitute a check that specified procedures have been followed. However, the reviewers will also consider whether the stock should be subject to a full assessment.

The full assessment done every 5 years of stocks that are not on the observation list, shall be reviewed by a group that includes external reviewers (external to ACFM).

Below is a list of stocks proposed for the Observation list and a table with a proposal for a time schedule for implementing the procedure in practice:

PROPOSAL FOR STOCKS ON THE OBSERVATION LIST

3	REVII	EW OF ST	OCKS	
	3.1		the Northeast Arctic (Subareas I and II)	
			Northeast Arctic cod	
		3.1.7.a	Norwegian spring-spawning herring	52
	3.2		North-Western Areas (Division Va and Subareas XII and XIV)	
			Icelandic cod (Division Va)	
	3.3		stocks at the Faroe Islands (Division Vb)	
	3.4		the Skagerrak and Kattegat (Division IIIa)	
		3.4.2	Cod in the Kattegat	
		3.4.7	Herring in Subdivisions 22-24 and Division IIIa (spring spawners)	
	3.5	Stocks in	the North Sea (Subarea IV)	
		3.5.2	Cod in Subarea IV (North Sea), Division VIId (Eastern Channel)	
			and Division IIIa (Skagerrak)	230
	3.5.8	Herring in	1 Subarea IV, Division VIId and Division IIIa (autumn spawners)	280
	3.6		the Eastern Channel (Division VIId)	
	3.7		Subarea VI	
		3.7.2.a	Cod in Division VIa (West of Scotland)	342
		3.7.8.a	Herring in Division VIa (North).	
	3.8	Stocks in	the Irish Sea (Division VIIa)	
		3.8.2	Cod in Division VIIa (Irish Sea)	429
	3.9	Stocks in	the Celtic Sea (Divisions VIIf-k), Western Channel (Division VIIe) and northern parts	
		of the Bay	v of Biscay (Divisions VIIIa,b-d, and e)	463
		3.9.8	Sole in Divisions VIIa,b (Bay of Biscay)	501
	3.10	Stocks in	Divisions VIIb,c,h-k (West of Ireland)	528
	3.11	Stocks in	the Iberian Region (Division VIIIc and Subareas IX and X)	537
		3.11.2	Hake - Southern stock (Divisions VIIIc and IXa)	539
		3.11.7.a	Sardine in Divisions VIIIc and IXa	
		3.11.8.a	Anchovy in Subarea VIII (Bay of Biscay)	570
	3.12	Widely D	istributed and Migratory Stocks	579
		3.12.2	Hake - Northern stock (Division IIIa, Subareas IV, VI and VII and Divisions VIIIa,b,d)	580
		3.12.5	Blue whiting combined stock (Subareas I-IX, XII and XIV	618
		3.12.6 E	Deep-water Fisheries Resources south of 63°N These will be assessed every second year	
			ollowing the present procedure	625
	3.13	Stocks in	the Baltic	642
		3.13.3	Herring in Subdivisions 22-24 and Division IIIa (spring spawners)	651
		3.13.4	Herring in Subdivisions 25-29 (including Gulf of Riga) and 32	652
		3.13.4.a	Herring in the Gulf of Riga	663
		3.13.8	Cod in Subdivisions 22-24 (including Subdivision 23)	692
		3.13.9	Cod in Subdivisions 25-32	
		3.13.15.b	Salmon in the Main Basin and Gulf of Bothnia (Subdivisions 22-31)	724
			Salmon in the Gulf of Finland (Subdivision 32)	
	3.14	Nephrops	Stocks These will be assessed every second year following the present procedure	756
4	ATLA	NTIC SAI	MON IN THE NORTH ATLANTIC AREA	829

Schedule for Assessments

	2003	2004	2005	2006	2007
AFWG	2000	2007	2000	2000	2001
Northeast Arctic Cod	OBS	OBS	OBS	OBS	OBS
Norwegian Coastal Cod	UPDATE	UPDATE	UPDATE	FULL	UPDATE
Northeast Arctic Haddock	UPDATE	FULL	UPDATE	UPDATE	UPDATE
Northeast Arctic Saithe	UPDATE	UPDATE	FULL	UPDATE	UPDATE
S.mentella I and II	NR	NR	NR	NR	NR
S.marinus I and II	NR	NR	NR	NR	NR
NEA Greenland halibut	FULL	UPDATE	UPDATE	UPDATE	FULL
	2003	2004	2005	2006	2007
NWWG					
Greenland Cod	NR	NR	NR	NR	NR
Icelandic Cod	OBS	OBS	OBS	OBS	OBS
Icelandic Haddock Icelandic Saithe	FULL	UPDATE	UPDATE		FULL
Icel Greenland halibut	UPDATE UPDATE	FULL UPDATE	UPDATE FULL	UPDATE UPDATE	UPDATE UPDATE
S.marinus V,VI,XII,XIV	NR	NR	NR	NR	NR
D-sea S.mentella V,VI,XIV	NR	NR	NR	NR	NR
Pel S.mentella V,VI,XIV	NR	NR	NR	NR	NR
Faroe Plateau Cod	FULL	UPDATE	UPDATE	UPDATE	FULL
Faroe Bank Cod	NR	NR	NR	NR	NR
Faroe Haddock	UPDATE	FULL	UPDATE	UPDATE	UPDATE
Faroe Saithe	UPDATE	UPDATE	FULL	UPDATE	UPDATE
	2003	2004	2005	2006	2007
WGNSSK					
Whiting Illa		NR	NR	NR	
Plaice Illa Sandeel Illa	UPDATE NR	UPDATE NR	UPDATE NR	FULL NR	UPDATE NR
North Sea Cod	OBS	OBS	OBS	OBS	OBS
North Sea Haddock	UPDATE	FULL	UPDATE	UPDATE	UPDATE
North Sea Whiting	FULL	UPDATE	UPDATE	UPDATE	FULL
North Sea Saithe (+VI)	UPDATE	UPDATE	FULL	UPDATE	UPDATE
North Sea Plaice	FULL	UPDATE	UPDATE	UPDATE	FULL
North Sea Sole	UPDATE	UPDATE	UPDATE	FULL	UPDATE
Norway pout IV+IIIa	UPDATE	UPDATE	UPDATE	FULL	UPDATE
Sandeel IV	UPDATE	FUI	UPDATE	UPDATE	UPDAT
Sandeel Shetland	NR	NF Viii	NR	NR	NR
Sandeel Via	NR	NF.	NR	NR	NR
E Channel Sole	UPDATE	FULL	UPDATE	UPDATE	UPDATE
E Channel Plaice	UPDATE	UPDATE	FULL	UPDATE	UPDATE
WOUGDO	2003	2004	2005	2006	2007
WGNSDS	ND				
Anglerfish Illa	NR	NR OBS	NR OBS	NR OBS	NR
Cod Via Cod Vib	OBS NR	NR NR	NR		OBS NR
Haddock Vla	FULL	UPDATE		<i>NR</i> UPDATE	FULL
Haddock Vlb	UPDATE	FULL	UPDATE	UPDATE	UPDATE
Whiting Vla	UPDATE	UPDATE	FULL	UPDATE	UPDATE
Whiting Vla	NR	NR	NR	NR	NR
Megrim Vla	NR	NR	NR	NR	NR
Anglerfish IV and VI	NR	NR	NR	NR	NR
Norway pout Vla	NR	NR	NR	NR	NR
Sandeel Vla	NR	NR	NR	NR	NR
Irish Sea Cod	OBS	OBS	OBS	OBS	OBS
Irish Sea Haddock	FULL	UPDATE	UPDATE	UPDATE	FULL
Irish Sea Whiting	UPDATE	FULL	UPDATE	UPDATE	UPDATE
Irish Sea Plaice	UPDATE	UPDATE	FULL	UPDATE	UPDATE
Irish Sea Sole	UPDATE	UPDATE	UPDATE	FULL	UPDATE

	2003	2004	2005	2006	2007
WGSSDS					
Cod VIIe-k	FULL	UPDATE FULL	UPDATE	UPDATE UPDATE	FULL
Whiting VIIe-k Celtic Sea Plaice	UPDATE UPDATE	UPDATE	UPDATE FULL	UPDATE	UPDATE UPDATE
Celtic Sea Sole	FULL	UPDATE	UPDATE	UPDATE	FULL
W Channel Plaice	UPDATE	FULL	UPDATE	UPDATE	UPDATE
W Channel Sole	UPDATE	UPDATE	FULL	UPDATE	UPDATE
Bay of Biscay Sole	OBS	OBS	OBS	OBS	OBS
Haddock VIIb-k	NR	NR	NR	NR	NR
	2003	2004	2005	2006	2007
WGHMM					
Megrim VII and VIIIa,b,d	FULL	UPDATE	UPDATE	UPDATE	FULL
<i>L.pisc.</i> VIIb,k and VIIIa,b,d	UPDATE	FULL	UPDATE	UPDATE	UPDATE
L.bude. VIIb,k and VIIIa,b,d	UPDATE	FULL	UPDATE	UPDATE	UPDATE
Southern Hake	OBS	OBS	OBS	OBS	OBS
L.boscii VIIIc and IXa	UPDATE	UPDATE	FULL		UPDATE
L.whiff. VIIIc and IXa Anglerfish VIIIc and IXa	UPDATE UPDATE	UPDATE UPDATE	FULL UPDATE	UPDATE FULL	UPDATE UPDATE
Northern Hake	OPDATE	OPDATE	OPDATE	OBS	OPDATE
Northern nake	083	083	083	003	003
	2003	2004	2005	2006	2007
WGBFAS					
Kattegat Cod	OBS	OBS	OBS	OBS	OBS
Herring 22-24 and Illa	OBS	OBS	OBS	OBS	OBS
C Baltic Herring (open sea)	OBS	OBS	OBS	OBS	OBS
Gulf of Riga Herring	OBS	OBS	OBS	OBS	OBS
Bothnian Sea Herring	FULL	UPDATE	UPDATE	UPDATE	FULL
Bothnian Bay Herring	UPDATE	UPDATE	FULL	UPDATE	UPDATE
Baltic Sprat	UPDATE	FULL	UPDATE	UPDATE	UPDATE
Western Baltic Cod	OBS	OBS	OBS	OBS	OBS
Eastern Baltic Cod Flounder	OBS UPDATE	OBS UPDATE	OBS UPDATE	OBS FULL	OBS UPDATE
Plaice	NR	NR	NR		NR
Dab	NR	NR	NR	NR	NR
Turbot	NR	NR	NR	NR	NR
Brill	NR	NR	NR	NR	NR
	2003	2004	2005	2006	2007
WGNPBW					
Norw Spring-sp Herring	OBS	OBS	OBS	OBS	OBS
Barents Sea capelin	NR	NR	NR	NR	NR
Icelandic Sum-sp Herring	FULL	UPDATE	UPDATE	UPDATE	FULL
Icelandic capelin	NR	NR	NR	NR	NR
Blue whiting combined	OBS	OBS	OBS	OBS	OBS
	2002	2004	2005	2000	2007
HAWG	2003	2004	2005	2006	2007
Sprat Illa	NR	NR	NR	NR	NR
North Sea Herring	OBS	OBS	OBS	OBS	OBS
North Sea Sprat	NR	NR	NR	NR	NR
Herring VlaN	OBS	OBS	OBS	OBS	OBS
Clyde Herring	NR	NR	NR	NR	NR
Irish Sea Herring	NR	NR	NR	NR	NR
Celtic Sea + VIIj Herring	NR	NR	NR	NR	NR
Sprat VIId,e	NR	NR	NR	NR	NR
Herring VIaS and VIIb,c	NR	NR	NR	NR	NR

	2003	2004	2005	2006	2007		
WGMHSA							
N Sea Horse mackerel	NR	NR	NR	NR	NR		
S Horse mackerel	OBS	OBS	OBS	OBS	OBS		
Sardine VIIIc and IXa	OBS	OBS	OBS	OBS	OBS		
Bay of Biscay Anchovy	OBS	OBS	OBS	OBS	OBS		
Anchovy IXa	NR	NR	NR	NR	NR		
Mackerel combined	FULL	UPDATE	UPDATE	FULL	UPDATE		
Western Horse mackerel	UPDATE	FULL	UPDATE	UPDATE	FULL		
OBS	Stock on the ol	oservation list;	Full assessmen	t			
FULL	Full assessmer	Full assessment					
UPDATE	Update assess	Update assessment					
NR	Not relevant						