

Scientific, Technical and Economic Committee for Fisheries (STECF)

# Report of the Working Group on Research Needs

# Review of list of surveys at sea (Appendix XIV OF EU Commission Regulation N°1581/2004) with their priorities (SGRN 07-01)

Brussels, 12-16 February 2007

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## TABLE OF CONTENTS

1.	Terms of reference of the working group1
2.	Prioritisation criteria
2.1.	Internationally coordinated and harmonised surveys
2.2.	Surveys that are designed to inform management decisions by either
2.3.	Use of the data collected during the surveys; access of data to the scientific community
3.	STECF Recommendations
SGRN (	07-01 WORKING GROUP REPORT ON RESEARCH NEEDS
1.	Introduction
1.1.	List of participants7
2.	Terms of reference
3.	Evaluation process
3.1	Development of operational prioritization criteria
3.2	List of surveys rated against operational prioritization criteria
4	The way forward on evaluating survey research needs
5	Recommendations
6	References
Append	ix 1
Append	ix 2
Append	ix 3
Append	ix 4
Annex I	Expert declarations

#### SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (STECF)

#### STECF COMMENTS ON THE REPORT OF THE WORKING GROUP ON RESEARCH NEEDS (SGRN)

#### 12 – 16 FEBRUARY 2007, BRUSSELS

#### REVIEW OF LIST OF SURVEYS AT SEA (APPENDIX XIV OF EU COMMISSION REGULATION N°1581/2004) WITH THEIR PRIORITIES (SGRN 07-01)

#### STECF OPINION EXPRESSED DURING THE PLENARY MEETING

#### OF 23-27 APRIL 2007 IN ISPRA

STECF was requested to review, comment on as appropriate and endorse the report prepared by SGRST/SGRN 07-01 (12-16 February 2007), which developed operational prioritisation criteria for surveys at sea in order to compile a list of surveys at sea to be considered for co-funding by the new DCR.

STECF indicated that surveys for deep-species would not be reviewed at this time since the EC is awaiting advice from ICES on the matter of deep-species surveys before proceeding further. In addition, no discussion of benthic fauna or tagging surveys and eel surveys was required during that meeting.

#### **1. TERMS OF REFERENCE OF THE WORKING GROUP**

STECF/SGRN 07/01 were asked to address three terms of reference

- a) Develop operational prioritisation criteria relating to an international dimension, importance of stocks, long term utility for fisheries management and cost efficiency in order to set up a list of surveys at sea to be supported by the new DCR with their priorities;
- b) Compile information on specific ongoing surveys including the updated information with regards to the surveys at sea provided by the Regional Coordination Meetings, the outcomes from the EVARES project, the ICES data quality exercise on demersal surveys, the ICES data quality exercise on demersal surveys;
- c) On the basis of the operational criteria and the information compiled propose a list of surveys by Region (Baltic Sea, North Sea, Northeast Atlantic, Mediterranean waters, Long Distant Fisheries (including the Northwest Atlantic)) with different level of priorities. Periodicity (annual, multi-annual) of the surveys will have to be taken into account and for each survey, objectives and the types of information collected will have to be specified.

### 2. **PRIORITISATION CRITERIA**

STECF/SGRN reviewed a draft submission from the EC of proposed operational prioritisation criteria. After considerable discussion and revision it was agreed that the following criteria should be applied to both the surveys co-funded by the current DCR and new proposed surveys from the most recent RCMs in order to develop a list of surveys at sea to be considered for co-funding by the new DCR. The full details of the criteria are reproduced below:

### 2.1. Internationally coordinated and harmonised surveys

The survey should be internationally co-ordinated, which means recommended and planned and quality controlled through an internationally organised steering mechanism from relevant international scientific organisations or appropriate scientific bodies within Regional Fisheries Organisations and implemented accordingly.

### 2.2. Surveys that are designed to inform management decisions by either

a) Providing input to assessment for stocks which are managed internationally

The survey shall provide input to an assessment (e.g. if it provides a significant contribution as a tuning fleet in an analytical assessment for important age groups (for stocks where the assessment uses catch data) or is an important survey in an assessment based only on survey data). The survey may also provide input to assessments by providing required information on biological parameters or by giving information on trends in situations where no analytical assessments are possible or

b) Responding to specific management needs for stocks which are managed internationally

# 2.3. Use of the data collected during the surveys; access of data to the scientific community

The required data from surveys to be co-funded by the Community will have to be accessible to international scientific organisations and appropriate scientific bodies within Regional Fisheries Organisations in accordance to Article 15(3) of the new Council Regulation (see Appendix 2) on a time scale and in a format as agreed by the scientific body. Also data should be available to the scientific community in accordance to Article 19 of this new Council Regulation (see Appendix 3).

Criteria 1-3 should be fulfilled simultaneously in order for an existing survey to be supported by the new DCR.

For pilot surveys (Pilot surveys are considered as those which have not yet been proven to deliver useful information with respect to the DCR) or significant extension of existing surveys to be co-funded under the DCR the following rules should apply:

1. Input to ecosystem monitoring of fisheries impact on the marine ecosystem according to the data collection regulation provisions normally should be integrated in existing surveys and support could be given to such integration. In cases where this is not possible support could be given to surveys dedicated to this purpose providing they fulfil criteria 1-3.

2. A pilot survey should satisfy criteria 1 and 3. It must also clearly demonstrate its potential value to contribute to stock assessment or a major additional contribution to

scientific advice over and above existing sources of information. Such survey should be evaluated against its expected contribution on an appropriate rolling cycle by a peer review committee and endorsed by the STECF.

STECF considers that the 3 criteria provide a suitable way of establishing eligibility for cofunding and that these will enhance the quality of European survey activities. STECF shares the comments made by STECF/SGRN 07-01, underlining that the current situation of many existing surveys could be improved in the near future, according to the new proposed criteria. The requirements will positively encourage good practices including inter alia coordination, international review, quality control and data transparency. Ensuring that surveys meet the criteria will require a substantial amount of work to be done either at the EC or at the MS level, together with the international organisations concerned. In respect of point 1, it is likely that this will lead to additional requirements for planning/coordination to cover surveys not presently covered by such processes – there may be additional resource requirements associated with this.

STECF is of the opinion that the criteria do not provide a basis for prioritising eligible surveys. A prioritisation process would be expected to include input from end users including advisory bodies and fishery managers.

STECF considers that the ecosystem approach data needs are implicitly included in point 2 of the proposed criteria. A more detailed consideration of the ecosystem potential of surveys is given in SGRN 06-01.

STECF/SGRN 07-01 decided to examine the 103 identified surveys according to this new proposed criteria by the help of two different sub-group of experts by geographical areas (A= Mediterranean Sea and North East Atlantic; B= Baltic Sea, North Sea, North East Arctic, North West Atlantic).

The results of this exploratory evaluation work by single survey are shown on Table 3.1 and 3.2 of the STECF/SGRN 07-01 report and are here summarised on Table 2.1.

evaluation	All areas combined	Mediterranean Sea and Northeast Atlantic	Baltic Sea, North Sea, Northeast Arctic, Northwest Atlantic
Fulfil the new criteria	45 (43.7%)	17 (30.4%)	28 (59.6%)
Not in agreement with the new criteria	49 (47.6%)	33 (58.9%)	16 (34.0%)
No sufficient data available	9 (8.7%)	6 (10.7%)	3 (6.4%)
total	103	56	47

Table 2.1 Summary result of the evaluation by STECF/SGRN 07-01 of existing surveys according to the new proposed criteria to be possibly adopted and enclosed in the DCR in 2008.

STECF/SGRN 07-01 emphasized that the reviews were conducted based upon information provided regarding the current status of surveys plans. <u>Therefore, by the time the new DCR</u> will come into effect, there may be instances where surveys will meet the SGRN criteria although at present they do not. Thus, special attention by the Commission to the comments in the review tables is imperative.

STECF, in agreement with STECF/SGRN 07-01, underlines that surveys (either if conducted at the international or national level) play an important role in the advisory process, as tuning indices in assessments, or directly in survey based assessments, as recruitment estimators in catch prognoses or as independent sources of information (abundance distribution, age structures, maturity and growth etc.) as bases for advice. It must be recognized that surveys also provide invaluable information on other issues such as ecosystem, biodiversity, non target species, habitats etc., which cannot be obtained otherwise. However, they are also very expensive and resources to finance surveys are limited. This justifies a frequent evaluation of quality and the usefulness of the surveys in relation to achieving their objectives – particularly in the context of providing information for management decisions. Also where two (or more) surveys have shown the same signal over a prolonged period, there may be scope to rationalise survey effort. However, where the surveys provide contradictory signals the evaluation will have to consider why and what action should be taken.

Therefore, STECF/SGRN 07-01 proposed to establish a procedure which ensures that the surveys, carried out within the DCR, are providing the required information with sufficient quality and are useful for providing advice. Such a procedure would ensure that all surveys would be considered at least once every 5 years based on an evaluation on their performance. It is important that these reviews should cover all uses of the survey, and not be restricted to use in fish stock assessments.

STECF/SGRN 07-01 underlined that different groups would play a role in parts of the procedure. Potential contributors are end-users (for example; STECF, ICES, GFCM, ICCAT, NAFO etc.), stock assessment working groups, and survey planning and coordination groups.

For new or pilot surveys the same criteria would generally apply. Pilot surveys are considered as those which have not yet been proven to deliver useful information with respect to the DCR. But it is also important to have a process to evaluate the potential use of new surveys, particularly the ability to provide information that can be used in advice. Clear guidelines on these and other criteria should be made available prior to any evaluation of the surveys. A flow chart was presented by STECF/SGRN 07-01 to explain the different steps of the future review and evaluation process.

STECF considers that the proposed review and evaluation process is unduly complex and that a more streamlined process involving the existing STECF- SGRN could fulfil this role.

STECF points out that the endorsement process might imply a time delay in properly settingup a survey proposal and this should be taken into account by the EC, particularly when pilot studies are required to supply new additional data for specific purposes.

STECF/ SGRN-07-01 recognised the surveys considered at the meeting for inclusion in the DCR cover only part of the stocks or issues for which STECF provides advice. For a number of stocks the available information is of poor quality (e.g. unreliable data from the commercial fisheries or simply scarce data) or the data are not representative of the stock. For those cases survey information is of prime importance for science-based advice.

STECF/SGRN-07-01 suggested a more proactive approach in defining research needs rather than only evaluating what is available, or what is proposed for DCR funding. In order to obtain a comprehensive overview of the research needs and in particular the gaps in the information needed to provide advice, STECF/SGRN-07-01 proposed to list all issues (for example fish stocks) for which advice is required, together with an inventory of the available sources of information for providing advice and a listing of the sources of information which have or can be used. The overview will identify data rich and data poor situations. The list will be particularly useful to identify data needs and provide an additional criterion for evaluation of data collection proposals including surveys.

#### **3. STECF RECOMMENDATIONS**

STECF endorses the following recommendations to the EC proposed by STECF/SGRN 07-01:

1. ensure a peer review of surveys co-funded within the DCR on an appropriate rolling cycle. This would be to cover all the aims of the survey, delivering information for resource or environmental assessments, advice, and management;

2. identify situations for which survey information, that is important for advice, management or assessment, is presently missing or inadequate;

3. initiate surveys to address the identified data gaps (e.g. by means of call for tenders, or the provision of additional ToRs for existing survey planning groups), in agreement with the outputs of the relevant working groups, either at the EC or international management bodies level.

STECF points out that the recommendation n. 2 should imply an additional STECF/SGRN meeting to be planned in the future, with the participation of representatives of the international scientific bodies concerned. STECF also notes that care will be required in drawing up the list (recommendation 2) such that an unrealistic 'wish-list' of possible surveys is avoided. Generation of the latter is unlikely to be deliverable under recommendation 3 and runs the risk of creating an inefficient and costly process. This further emphasises the need for the development of a well-defined prioritisation process.

Taking into account that for many of the surveys, the new criteria, review process and prioritization requires the co-operation of other scientific or management bodies, STECF suggest that the necessary steps should be taken by the EC to recommend and promote a suitable international forum. While various models for such a forum could be conceived, STECF is of the opinion that the existing STECF/SGRN offers a cost effective and robust solution. Furthermore, STECF suggests that representatives of the international scientific bodies concerned should routinely participate in the STECF/SGRN meeting dealing with the survey review and prioritization to ensure effective communication and feedback. Such a system would also facilitate coordination in the event of member states dropping out of surveys.

#### SGRN 07-01 WORKING GROUP REPORT ON RESEARCH NEEDS

#### REVIEW OF LIST OF SURVEYS AT SEA (APPENDIX XIV OF EU COMMISSION REGULATION N°1581/2004) WITH THEIR PRIORITIES

#### Brussels, 12-16 February 2007

This report does not necessarily reflect the view of the European Commission and in no way anticipates the Commission's future policy in this area

#### **1. INTRODUCTION**

The STECF Sub-Group on Research Needs and Data Collection (SGRN) met in Brussels during February 12-16, 2007. The purpose of the meeting was to develop operational prioritisation criteria for surveys at sea in order to compile a list of surveys at sea to be considered for co-funding by the new DCR.

At the opening of the meeting it was indicated that surveys for deep-species would not be reviewed at this time since the EC is awaiting advice from ICES on the matter of deep-species surveys before proceeding further. In addition, no discussion of benthic fauna or tagging surveys and eel surveys was required during this meeting (see ToR 2(d)).

A presentation on the data quality exercise for demersal surveys was given by members of the ICES Secretariat for consideration during the course of the meeting. An overview of the presentation is available in Appendix 1.

#### **1.1.** List of participants

#### **STECF Members**

Graça Pestana Antonio Di Natale Max Cardinale Stylianos Somarakis

#### Invited experts

Ray Bowering (Chair) Mette Bertelsen (ICES) Hans Lassen (ICES) Lena Larsen (ICES) Frans Van Beek Colm Lordan Jorgen Dalskov **Tiit Raid** Norbert Rohlf Christopher Zimmermann David Reid Andrew Newton Chris Darby Jacques Bertrand Enrico Arneri Luis Gil de Sola Antonio Vazquez

*JRC Experts* Franz Hölker Doug Beare

#### European Commission

Antonio Cervantes DG Fish Poul Degnbol DG Fish Olle Hagström DG Fish Philippe Moguedet DG Fish Doug Beare (JRC, STECF secretariat) Franz Hölker (JRC, STECF secretariat)

#### **2. TERMS OF REFERENCE**

- 1. Develop operational prioritisation criteria relating to an international dimension, importance of stocks, long term utility for fisheries management and cost efficiency in order to set up a list of surveys at sea to be supported by the new DCR with their priorities
- 2. Compile information on specific ongoing surveys including
  - a. the updated information with regards to the surveys at sea provided by the Regional Coordination Meetings
  - b. the outcomes from the EVARES project
  - c. the ICES data quality exercise on demersal surveys
  - d. the additional information provided by ICES with regards to the surveys on anchovies in the Bay of Biscay and the deep-species in the North Eastern Atlantic and the overview on long-time benthic fauna surveys
- 3. On the basis of the operational criteria and the information compiled propose a list of surveys by Region (Baltic Sea, North Sea, Northeast Atlantic, Mediterranean waters, Long Distant Fisheries (including the Northwest Atlantic)) with different level of priorities. Periodicity (annual, multi-annual) of the surveys will have to be taken into account. For each survey objectives and the types of information collected will have to be given.

#### **3.** EVALUATION PROCESS

#### **3.1** Development of operational prioritization criteria

The SGRN reviewed a draft submission from the EC of proposed operational prioritization criteria. After considerable discussion and revision it was agreed that the following criteria should be applied to both the surveys co-funded by the current DCR and new proposed surveys from the most recent RCMs in order to develop a list of surveys at sea to be considered for co-funding by the new DCR:

#### Agreed Criteria

#### 1. Internationally coordinated and harmonised surveys

The survey should be internationally co-ordinated, which means:

- recommended and
- planned and quality controlled

through an internationally organised steering mechanism from relevant international scientific organisations or appropriate scientific bodies within Regional Fisheries Organisations and implemented accordingly.

#### 2. Surveys that are designed to inform management decisions by either

#### a) Providing input to assessment for stocks which are managed internationally

The survey shall provide input to an assessment (e.g. if it provides a significant contribution as a tuning fleet in an analytical assessment for important age groups (for stocks where the assessment uses catch data) or is an important survey in an assessment based only on survey data). The survey may also provide input to assessments by providing required information on biological parameters or by giving information on trends in situations where no analytical assessments are possible

or

# b) Responding to specific management needs for stocks which are managed internationally

# 3. Use of the data collected during the surveys; access of data to the scientific community.

The required data from surveys to be co-funded by the Community will have to be accessible to international scientific organisations and appropriate scientific bodies within Regional Fisheries Organisations in accordance to Article 15(3) of the new Council Regulation (see Appendix 2) on a time scale and in a format as agreed by the scientific body.

Also data should be available to the scientific community in accordance to Article 19 of this new Council Regulation (see Appendix 3).

Criteria 1-3 should be fulfilled simultaneously in order for an existing survey to be supported by the new DCR.

#### For pilot surveys (Pilot surveys are considered as those which have not yet been proven to deliver useful information with respect to the DCR) or significant extension of existing surveys to be co-funded under the DCR the following rules should apply:

Input to ecosystem monitoring of fisheries impact on the marine ecosystem according to the data collection regulation provisions normally should be integrated in existing surveys and support could be given to such integration. In cases where this is not possible support could be given to surveys dedicated to this purpose providing they fulfil criteria 1-3.

A pilot survey should satisfy criteria 1 and 3. It must also clearly demonstrate its potential value to contribute to stock assessment or a major additional contribution to scientific advice over and above existing sources of information.

Such survey should be evaluated against its expected contribution on an appropriate rolling cycle by a peer review committee and endorsed by the STECF.

#### 3.2 List of surveys rated against operational prioritization criteria

The detailed lists of surveys to be evaluated by region were available from the most recent RCM reports from the respective regions i.e. Baltic Sea; North Sea and Northeast Arctic; Northwest Atlantic (NAFO); Northeast Atlantic; and Mediterranean waters. A separate table for surveys in the Mediterranean was prepared by experts from the Mediterranean countries at this meeting (see Appendix 4).

In order to expedite the review of the surveys against the agreed operational prioritization criteria the SGRN was divided into two groups.

Group 1 was Chaired by D. Reid, UK and dealt with the surveys provided by the Northeast Atlantic and Mediterranean RCMs.

Group 2 was Chaired by C. Darby, UK and dealt with the surveys provided by the Baltic Sea, North Sea and Northeast Arctic, and Northwest Atlantic (NAFO) RCMs.

The results of the review are presented in Tables 3.1 and 3.2. However, it must be emphasized that the reviews were conducted based upon information provided regarding the current status of surveys plans. Therefore, by the time the new DCR will come into effect, there may be instances where surveys will meet the SGRN criteria although at present they do not. Thus, special attention by the Commission to the comments in the review tables is imperative.

**Table 3.1:** SGRN07-01 Evaluation of surveys in the Northeast Atlantic and Mediterranean RCMs areas.

		Member States/	Current		Crit	teria		Inclusion in	Comments
Name of the survey	Acronym	Institutes involved in the survey	Priority	1	2a	2b	3	the new DCR	
Western IBTS 4th quarter	IBTS Q4	UK(Eng,Scot),IRL,FR, SP,PT	1	Yes	Yes	Yes	Yes	Yes	SP, PT and IR still in process for DATRAS end 2007
Blue whiting survey		UK(Sco), DK,IRL,NL,FR, SP,Nor,Russ	1	Yes	No	Yes	Yes	Yes	Coordinated in planning and implimentation but not completely in integration of output data. Database held in one institute but not fully accessable - should be made available
International mackerel and horse mackerel egg survey (triennial)		UK(Sco) ,IRL,NL,DE,SP,PT	1	Yes	Yes	Yes	Yes	Yes	Database should be made available, possibly via ICES Aggregated Data available to Ass WG. Raw data held in Scotland
Sardine, anchovy, horse mackerel acoustic survey		FR, SP,PT	1	Yes	Yes	Yes	Yes	Yes	Integrated database should be established and made available- Aggregated data available to WG (raw data held in original institute, available, but not fully accessable
Sardine DEPM (triennal)	DEPM	SP, PT	1	Yes	Yes	Yes	Yes	Yes	Database held in one institute but not full accessable
Nephrops UWTV & Ecology Survey Irish Sea	UWTV(FU15)	IRL, UK (NI)	2	Yes	Yes	Yes	Yes	Yes	Coordination WKNEPHTV and by bilateral agreement. Aggregated data provided to WG. Raw data is video, and is available
Irish Monk survey (now not proposed for DCR)	IMAS	IRL,UK(Sco)	nl DCR						Status quo
Irish Deepwater survey A63 (not within remit)	IDS	IRL, UK (Sco)	2						Linked to Scottish survey - pending conclusions on Planning group
Sardine, Anchovy, Horse Mackerel acoustic survey (basically one survey)	PELACUS10	SP, FR	nl DCR	No	No	Yes	Yes	No	Coordination by WGACEGG would satisfy C1. Data held in national databases
Sardine Recruitment Survey	SAR	РТ	2	No	No	Yes	Yes	No	Coordination by WGACEGG would satisfy C1. Stock is under bilateral management ES PT
Scottish Western IBTS	IBTS Q1	UK(Sco)	1*	Yes	Yes	Yes	Yes	Yes	
ISBCBTS September Spawning/pre-spawning herring	ISBCBTS	UK(Eng)	1	Yes	Yes	No	Yes	Yes	Data should be incorporated in DATRAS
acoustic survey (Scotland)		UK(Sco)	1	Yes	Yes	No	Yes	Yes	Access to EchoHer is not fully possible
Spawning/pre-spawning herring acoustic survey (N Ireland)		UK(NI)	1	No	Yes	No	Yes	No	Was previously coordinated under PGHERS - should be again. Data access should be detailed. Data to WG are aggregated acoustic data, raw data held in original institute
Northwest herring acoustic Survey	NWHAS	IRL	1	No	Yes	No	Yes	No	There is a need for improved co-ordination through PGHERS. Data access should be detailed. Data to WG are aggregated acoustic data, raw data held in original institute
Celtic Sea herring acoustic survey	CSHAS	IRL	1	No	Yes	No	Yes	No	There is a need for improved co-ordination through PGHERS. Data access should be detailed. Data to WG are aggregated acoustic data, raw data held in original institute
WCBTS	VIIe BTS	UK(Eng)	1	Yes	Yes	No	Yes	Yes	Aggregated data available to Ass WG. Raw data held in England - should be in DATRAS
DARD groundfish (now AFBI groundfish)	AFBI Q1 GFS	UK(NI)	1 *	No	Yes	No	Yes	No	Should be coordinated under WGIBTS. Data available to Ass WG
DARD groundfish (now AFBI groundfish)	AFBI Q4 GFS	UK(NI)	1	No	Yes	No	Yes	No	Should be coordinated under WGIBTS. Data available to Ass WG
Nephrops TV survey (Inshore) - FU 11/12		UK(Sco)	2	Yes	No	No	No	No	Coordination by WKNEPHTV
Nephrops TV survey (Offshore) - FU 11/12/13		UK(Sco)	2	Yes	Yes	No	Yes	Yes	Coordination by WKNEPHTV. Intermediate data not always available. Aggregated Data available to Ass WG. Raw data held in Scotland
Nephrops Survey	Nephrops Q2	UK(NI)	2	No	Yes	No	Yes	No	No obvious co-ordination body. Possibly WGIBTS. Aggregated Data available to Ass WG. Raw data held in NI
Nephrops UWTV Aran Grounds	UWTV(FU17)	IRL	nl DCR	Yes	Yes	No	Yes	Yes	Aggregated Data available to Ass WG. Raw data held in Ireland. Coordination under WKNEPHTV
Nephrops UWTV Survey Celtic Sea (pilot)	UWTV(FU20- 22)	IRL	nl DCR	Yes	NA		Yes	Yes	Direct use in assessment is likely. Survey first carried out in 2006. Aggregated Data will be available to Ass WG. Raw data held in Ireland Coordination under WKNEPHTV

		Member States/	Current	t Criteria			Inclusion in	Comments	
Name of the survey	Acronym	Institutes involved in the survey	Priority	1	2a	2b	3	the new DCR	
Nephrops in FU 28+29	CTVS	РТ	1*	No	No	Yes	Yes	No	Data used to set closed areas and the stock under recovery plan. No obvious coord body. Possibly WGIBTS. Possible change to TV survey - pilot being tried out currently. Aggregated Data available to Ass WG. Raw data held in Portugal.
Rockall Survey		UK(Sco)	2	No	Yes	No		No	Should be coordinated under WGIBTS. DATRAS data delivery. Aggregated Data available to Ass WG. Raw data held in Scotland.
AFBI (previously DARD) herring larvae		UK(NI)	2	No	Yes	No	Yes	No	Should be cooordinated by PGHERS. Aggregated Data available to Ass WG. Raw data held in NI.
AFBI (previously DARD) Mik-net		UK(NI)	1*	No	Yes	No	Yes	No	Should be cooordinated by PGHERS Aggregated Data available to Ass WG. Raw data held in NI.
Tuna Tagging (outside remit)	TunaTag	IRL	1						
Tuna Tagging (outside remit) Tuna Tagging (outside remit)	ROJOCAN	PT SP	1						
Biological Sampling Survey (pilot)	BSS	IRL	nl DCR	Yes	NA	No	Yes	Yes	Quetsions raised about cost effectiveness & status of Coord body WKMAT. Aggregated Data is made available to Ass WG. Raw data held in Ireland.
Gadoid fecundity study		UK(NI)	2	No	No	NA	Yes	No	Could have coord from PGEGGS. Viewed as pilot work under national programme. Used for definition of closed areas for cod recovery plan. No data availability detailed
Hake tagging (outside remit)	MARQUAGE, GENISOLE, MERCAP	FR	nl DCR						
Hake tagging (outside remit)	MARMER	SP	nl DCR						
Hake tagging (outside remit) Deep Water A15	MARMER	SP UK(Sco)	nl DCR 2						
Deep Sea Fish Survey (not within	PPROF	РТ	2						
remit)									
DEEP (not within remit) Egg production Survey (pilot)	DEEP	PT UK(NI,Eng)	2	No	NA	Yes	Yes	No	Could have coord from PGEGGS. Used for closed areas for cod recovery plan. No data plan but should be available.
Egg production Survey (pilot)		UK(NI,Eng)	2	No	NA	Yes	Yes	No	Could have coord from PGEGGS. Used for closed areas for cod recovery plan. No data plan but should be available.
Egg production Survey (pilot)		UK(NI,Eng)	2	No	NA	Yes	Yes	No	Could have coord from PGEGGS. Used for closed areas for cod recovery plan. No data plan but should be available.
Egg production Survey (pilot)		UK(NI,Eng)	2	No	NA	Yes	Yes	No	Could have coord from PGEGGS. Used for closed areas for cod recovery plan. No data plan but should be available.
Egg production Survey (pilot)		UK(NI,Eng)	2	No	NA	Yes	Yes	No	Could have coord from PGEGGS. Used for closed areas for cod recovery plan. No data plan but should be available.
Anchovy DEPM (pilot)	BOCADEVA	SP	nl DCR	No	NA		Yes	No	Direct use in assessment is likely. Could have coordination from WGACEGG to satisfy criterion 1. No data plan but should be available.
Bay of Biscay benthic resources trawl survey (Pilot)	ORHAGO- SOLE	FR	nl DCR	No	NA		Yes	No	Direct use in assessment is likely (no other Fishery independent tuning index). Recommended by WGSSDA. Coordination should be through WGIBTS. No data plan but should be available.
Bay of Biscay benthic resources trawl survey (Pilot)	ORHAGO- LANG	FR	nl DCR	No	NA		Yes	No	Direct use in assessment is likely (no other Fishery independent tuning index). Recommended by ACFM. No obvious Coordination group - similar surveys in Irish Sea. No data plan but should be available.
Scallops surveys (national level)	COPER, COSB	FR	nl DCR						
Coastal nurseries surveys (national level)	CREBOUR, PECOS, NURVIL	FR	nl DCR						

#### Table 3.1 continued...

		Member States/	Current		Crit	teria		Inclusion in	Comments
Name of the survey	Acronym	Institutes involved in the survey	Priority	1	2a	2b	3	the new DCR	
Biomass of Anchovy	BIOMAN	SP	1	Yes	Yes	Yes	Yes	Yes	Aggregated Data available to Ass WG. Raw data held in Spain.
Juvenil of Anchovy (Pilot)	JUVENA	SP	nl DCR	No	NA	Yes	Yes	No	Could have coordination from WGACEGG to satisfy criterion 1. Should consider combined/integrated survey in autumn for anchovy. 2b. Direct link to management decisions. No data plan but should be available.
Groundfish Survey for Hake (pilot)	PESCADA-BD	РТ	1*	No	NA	Yes - evaluat ion of recove ry plan	Yes	No	Coordination should be through WGIBTS. New survey started in 2005. No data plan but should be available.
South Atlantic Bottom Trawl Survey	ARSA	SP	1*	No	No	No	NA	No	
Anchovy Acoustic Survey (Gulf of Cadiz) (pilot)	ECOCADIZ	SP	nl DCR	No	NA		Yes	No	Could have coordination from WGACEGG to satisfy criterion 1. Other indices available, and no accepted asssessment. Difficult to compare survey impact in assessment. No data plan but should be available.
Hatton Bank (viewed as candidate research project)	ECOVUL/ARP A	SP	nl DCR						
ARQDAÇO (not within remit)	ARQDAÇO	РТ	2	No					
PELAGICOS	PELAGICOS	РТ	2	No	Yes	No	No	No	There is little other survey data, and these surveys could be important - difficult to evaluate. No survey data seen by ICES
Iberian Coast Acoustic Survey	ECOMED	ES	2	No	Yes		Yes	No	Criterion 1 will be satisfied when merged in one international mediterranean acoustic survey, under SAC and MEDIAS. Used in SAC assessments. Aggregatede data provided to SAC and raw data held by national institutes
Gulf of Lions acoustic survey	PELMED	FR	2	No	Yes		Yes	No	Criterion 1 will be satisfied when merged in one international mediterranean acoustic survey, under SAC and MEDIAS. Used in SAC assessments. Aggregatede data provided to SAC and raw data held by national institutes
Sicilian Channel acoustic survey	ANCHOVY	IT, ML	not present in DCR but carried out since 1998	No	Yes		Yes	No	Criterion 1 will be satisfied when merged in one international mediterranean acoustic survey. Partial coordination through MEDSUDMED, but not full technical steering group (coordination mechanism being developed through SAC and MEDIAS. Used in SAC assessments. Aggregatede data provided to SAC and raw data held by national institutes
Adriatic acoustic survey		IT, SL, non member states: Croatia, Montenegro, Albania	not present in DCR but carried out since 1975	No	Yes		Yes	No	Criterion 1 will be satisfied when merged in one international mediterranean acoustic survey. Partial through ADRIAMED, but not full technical steering group (coordination mechanism being developed through SAC and MEDIAS.
Aegean acoustic and egg production survey	ANCHOVY	EL	2	No	Yes		Yes	No	Criterion 1 will be satisfied when merged in one international mediterranean acoustic survey. Acoustic coordination mechanism being developed through EASTMED, SAC and MEDIAS. Used in SAC assessments. Aggregatede data provided to SAC and raw data held by national institutes
Pan-Mediterranean pelagic survey	MEDIAS	ES, FR, IT, EL, ML, SL; and non member states	not present in DCR	Yes	Yes		Yes	Yes	This survey will be a combination of all 5 surveys above, provided with a scientific steering group. This will be the steering body for these surveys
Mediterranean International bottom trawl survey	MEDITS	ES, FR, IT, EL, ML, SL; CY, non member states: Croatia, Montenegro, Albania, Morocco,	1	Yes	Yes		Yes	Yes	To date coordination group is voluntary and not under any recognized international body. Need to improve disaggregated data exchange. Aggregated data provided to SAC and raw data held by national institutes
Autumn Bottom Trawl Survey Central Mediterranean	GRUND	IT, ML, SL, + non member states: Croatia, Montenegro, Albania	2	No	Yes		Yes	No	Adaptive Management using assessment data in this area is not currently developed enough to make full use of these survey data. International steering group should be set up under SAC or FAO/ICES WGFTFB). Used in assessment in some stock cases, as with MEDITS. Aggregated data provided to SAC and raw data held by Italy

**Table 3.2:** SGRN07-01 Evaluation of surveys in the Baltic Sea, North Sea and Northeast Arctic, and Northwest Atlantic (NAFO) RCMs.

Name of the survey	Acronym	Member States/ Institutes	Current		Cri	teria		Inclusion in	Comments
Ivanie of the survey	Acronym	involved in the survey	Priority	1	2a	2b	3	the new DCR	
IBTS 1st quarter (International	IBTS Q1	Den, UK, Fra, Ger, Neth, Nor,	1	Yes	Yes	No	Yes	Yes	
Bottom Trawl Survey) IBTS 3rd quarter (International Bottom Trawl Survey)	IBTS Q3	Swe Den, Ger, Nor, UK(Sco), UK (Eng), Swe	1	Yes	Yes	No	Yes	Yes	
NS Herring Acoustic Survey	NSHAS	UK (Sco), Nor, Ger, Neth	1	Yes	Yes	No	Yes	Yes	
BITS 1st quarter (Baltic International Trawl Survey)	BITS Q1	Den, Ger, Swe, Pol, Lat, Rus	1	Yes	Yes	No	Yes	Yes	Also included within the Baltic Area
BITS 4st quarter (Baltic International Trawl Survey)	BITS Q4	Den, Ger, Swe, Pol, Lat, Rus	1	Yes	Yes	No	Yes	Yes	Also included within the Baltic Area
North Sea Beam Trawl Survey	BTS	Bel, Ger, Neth, UK(Eng)	1	Yes	Yes	No	Yes	Yes	Why are the Belgium and German data not used by the assessment WG?
Demersal Young Fish and Brown Shrimp Survey	DYFS	Bel, Ger, Neth, Fr, UK(Eng)	1	Yes	Yes	No	Yes	Yes	
Mackerel egg survey	NSMEGS	Nor, Neth	1	Yes	Yes	No	Yes	Yes	The North Sea egg survey is conducted one year later than the MEGS survey and should be funded under the same programme.
Sole net survey	SNS	The Netherlands	1	Yes	Yes	No	Yes	Yes	
International Herring Larvae Surveys in the North Sea	IHLS	Ger, Neth	2	Yes	Yes	No	Yes	Yes	
German Cod Survey (now German Autumn Survey Exclusive Economic Zone)	GASEEZ	Germany	2	No	No	No	Yes	No	Could be used for ecosystem aspects
Channel Ground Fish survey	CGFS	France	1*	No	Yes	No	Yes	No	Not an iternationally co- ordinated the survey. The survey could be co-ordinated by ICES IBITS and it is recommended that it is considered by that group
Nephrops TV survey (FU 7)	NTV7	UK(Sco)	2	Yes	Yes	No	Yes	Yes	Survey will be reviewed by ICES MKNEPHTV in April 2007
Nephrops TV survey (FU 8)	NTV8	UK(Sco)	2	Yes	Yes	No	Yes	Yes	Survey will be reviewed by ICES MKNEPHTV in April 2007
Nephrops TV survey (FU 9)	NTV9	UK(Sco)	2	Yes	Yes	No	Yes	Yes	Survey will be reviewed by ICES MKNEPHTV in April 2007
Surveys in area I, II, V, X, XII,	XIV and NAI		1	-	r —	1	1	1	
International ecosystem survey in the Nordic Seas	ASH	Den, Ger, Ire, Neth, Swe, UK, Nor, Farroes, Ice, Rus	1	Yes	Yes	No	Yes	Yes	
International Redfish Trawl and Acoustic Survey	REDTAS	Ger, Isl, Rus	1	Yes	Yes	No	Yes	Yes	The survey needs improvement and expansion and wider participation. Conducted every second year.
Flemish Cap groundfish survey	FCGS	Spain, Portugal	1	Yes	Yes	No	Yes	Yes	NAFO co-ordinated, extended to 1400m in 2003
Greenland Groundfish Survey	GGS	Germany	2	Yes	Yes	No	Yes	Yes	NAFO co-ordinated
3L,NO groundfish survey Pilot surveys	PLATUXA	Spain	2	Yes	Yes	No	Yes	Yes	NAFO co-ordinated
Nephrops TV Survey (FU3&4)	NTV3&4	Den, Swe	Not listed in current DCR	Yes	N/A	No	Yes	Yes	Survey will be reviewed by ICES WKNEPHTV in April 2007
Nephrops TV survey (FU 6)	NTV6	UK(Eng)	Not listed in current DCR	Yes	N/A	No	Yes	Yes	Survey will be reviewed by ICES WKNEPHTV in April 2007
North Sea Sandeels Survey	NSSS	Den, Nor	Not listed in current DCR	Yes	N/A	Yes	Yes	Yes	Currently the time series is short. The survey will be co-ordinated by ICES from 2007. Inclusion within the new DCR should be evaluated after the survey design has been evaluated and co- ordinated and results have been reviewed by ICES and STECF
Sole survey in Div IIIa	SOLES IIIa	Denmark	Not listed in current DCR	No	N/A	No	Yes	No	The survey could be co-ordinated by ICES BITS and it is recommended that it is considered by that group. Inclusion within the new DCR should be evaluated after the survey design and time series have been reviewed and validated by ICES.

Table 3.2 continued....

Name of the survey	Acronym	Member States/Institutes	Current		Crit	teria		Inclusion in	Comments	
		involved in the survey	Priority	1	2a	2b	3	the new DCR		
Pilot surveys									The survey could be co-ordinated	
Skagerrak/Kattegat coastal survey Q4	SKCS4	Sweden	Not listed in current DCR	No	N/A	No	Yes	No	The survey could be co-ordinated by ICES BITS and it is recommended that it is considered by that group. Inclusion within the new DCR should be evaluated after the survey design and time series have been reviewed and validated by ICES.	
Belgium Glass Eel Recruitment Survey	BGERS	Belgium	Not listed in current DCR	No	N/A	No	No	No	Awaits eel management plan and inland waters are not included in the DCR. Local surveys are of limited use unless co-ordinated across the stock area	
The Dutch Glass Eel Recruitment Survey	NGERS	Netherlands	Not listed in current DCR	No	N/A	No	No	No	Awaits eel management plan and inland waters are not included in the DCR. Local surveys are of limited use unless co-ordinated across the stock area	
German Small Scale Bottom trawl Survey (Summer)	GSBTS (S)	Germany	Not listed in current DCR	No	N/A	No	Yes	No	Localised survey. Used by the WGECO and WGFE for ecosystem aspects	
German Small Scale Bottom trawl Survey (Winter)	GSBTS (W)	Germany	Not listed in current DCR	No	N/A	No	Yes	No		
Sole Survey	SOLES IV	Germany	Not listed in current DCR	No	N/A	No	Yes	No		
Winter Crangon Survey	WCS	Germany	Not listed in current DCR	No	N/A	No	Yes	No	Crangon is not an EU managed stock	
International Plaice, Cod, Haddock and Whiting egg survey	PLACES	UK, Neth, Den, Nor, Ger	Not listed in current DCR	Yes	N/A	Yes	Yes	No	Planned to be conducted every five years. It is questioned whether a survey conducted every five year can provide information for management purposes. The survey could be included within a specific EU project	
Lithuanian survey on Grenland halibut	??	??	Not listed in current DCR		N/A				No information provided	
Polish survey in Grenland halibut	??	??	Not listed in current DCR		N/A				No information provided	
International Greater Silver Smelt survey in Area II	IGSS	??	Not listed in current DCR		N/A				Not within the groups remit	
Baltic Surveys Baltic International Trawl Surveys,									It could be explored whether	
Quarter 1 Baltic International Trawl Surveys, Quarter 4	BITS	Ger, Den, Lat, Lith, Pol, Swe Ger, Den, Est, Lat, Lith, Pol, Swe	1	Yes Yes	Yes Yes	No No	Yes	Yes Yes	flatfish data can be used It could be explored whether flatfish data can be used	
Baltic International Acoustic Survey	BIAS	Ger, Den, Est ,Fin, Lat, Lith ,Pol, Swe	1	Yes	Yes	No	Yes	Yes	ACFM & SGRN recommend including SD 30 & 31	
Gulf of Riga Acoustic Herring Survey	GRAHS	Est, Lat	1	Yes	Yes	No	Yes	Yes	including 5D 50 & 51	
German Flatfish survey	GFLATFS	Ger	2	No	No	No	Yes	No		
Baltic Pilot Surveys	SPRAS	Ger, Lat, Lith, Rus, Pol	1	Yes	N/A	No	Yes	Yes	Currently the time series is to short but it is considered that the survey will provide assessment information. Inclusion within the new DCR should be evaluated after survey results have been reviewed by ICES in 2008	
RÜGEN Herring Larvae survey	RHLS	Ger	2	Yes	N/A	No	Yes	Yes	Currently the time series is being revised based on a new stratification following peer review in 2006. Inclusion within the new DCR should be evaluated after survey results have been reviewed by ICES in 2008	
Box-Survey in the German EEZ of the Baltic Sea	BaltBox	Ger	Not listed in current DCR	No	N/A	No	Yes	No	Localised survey. Could be used to provide data for ecosystem aspects	
Coastal monitoring	HELCOM	Fin, Est, Lat, Pol, Swe	Not listed in current DCR	Yes	N/A	No	Yes	No	The survey is for freshwater species and flounder that are not managed under the CFP	
Flatfish Coastal Monitorig	FCM proposition	Pol, Ger	Not listed in current DCR	No	N/A	No	No	No	An extended BITS could provide the same iin formation	
River monitoring of Baltic salmon (in index rivers specified by the WGBAST)	RIVERSAL proposition	Est, Fin, Swe (possibly Lat, Lit)	Not listed in current DCR	No	N/A	No	No	No	At present not in the scope of the DCR.	

#### 4 THE WAY FORWARD ON EVALUATING SURVEY RESEARCH NEEDS

Surveys play an important role in the advisory process, as tuning indices in assessments, or directly in survey based assessments, as recruitment estimators in catch prognoses or as independent sources of information (abundance distribution, age structures, maturity and growth etc.) as bases for advice. It must be recognized that surveys also provide invaluable information on other issues such as ecosystem, biodiversity, non target species, habitats etc., which cannot be obtained otherwise. However, they are also very expensive and resources to finance surveys are limited. This justifies a frequent evaluation of quality and the usefulness of the surveys in relation to achieving their objectives – particularly in the context of providing information for management decisions. Also where two (or more) surveys provide estimates for one stock, the need for both should be evaluated. Where both surveys have shown the same signal over a prolonged period, there may be scope to rationalise survey effort. However, where the surveys provide contradictory signals the evaluation will have to consider why and what action should be taken.

Therefore, SGRN-07-01 proposes to establish a procedure which ensures that the surveys, carried out within the DCR, are providing the required information with sufficient quality and are useful for providing advice. Such a procedure would ensure that all surveys would be considered at least once every 5 years based on an evaluation on their performance. It is important that these reviews should cover all uses of the survey, and not be restricted to use in fish stock assessments.

It is clear that different groups would play a role in parts of the procedure. Potential contributors are end-users (for example; STECF, ICES, GFCM, ICCAT, NAFO etc.), stock assessment working groups, and survey planning and coordination groups.

For new or pilot surveys the same criteria would generally apply. Pilot surveys are considered as those which have not yet been proven to deliver useful information with respect to the DCR. But it is also important to have a process to evaluate the potential use of new surveys, particularly the ability to provide information that can be used in advice. Clear guidelines on these and other criteria should be made available prior to any evaluation of the surveys.

A flow chart illustrating how this review process could be structured is presented in Figure 4.1.

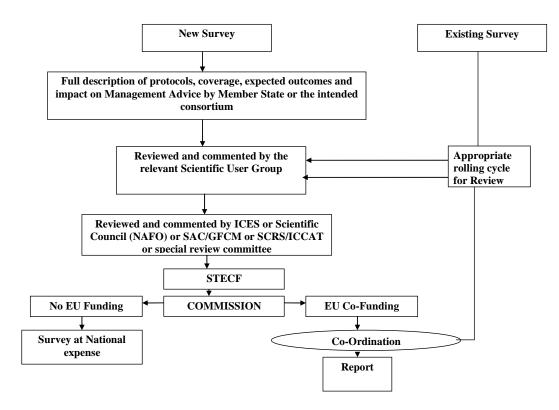


Figure 4.1: An example flow chart illustrating the review process for surveys.

#### Identification of data gaps and research needs

It is recognised that the surveys considered by SGRN-07-01 for inclusion in the DCR cover only part of the stocks or issues for which STECF provides advice. For a number of stocks the available information is of poor quality (e.g. unreliable data from the commercial fisheries or simply scarce data) or the data are not representative of the stock. For those cases survey information is of prime importance for science-based advice.

SGRN-07-01 promotes a more proactive approach in defining research needs rather than only evaluating what is available, or what is proposed for DCR funding. In order to obtain a comprehensive overview of the research needs and in particular the gaps in the information needed to provide advice, SGRN-07-01 proposes to list all issues (for example fish stocks) for which advice is required, together with an inventory of the available sources of information for providing advice and a listing of the sources of informations. The list will be particularly useful to identify data needs and provide an additional criterion for evaluation of data collection proposals including surveys. One possible start point for this process could be the lists of stocks provided by ICES to this meeting of SGRN and/or the stock list considered by STECF.

## 5 **Recommendations**

SGRN 07-01 recommends that the EU Commission develops a scheme to:

- ensure a peer review of surveys co-funded within the DCR on an appropriate rolling cycle. This would be to cover all the aims of the survey, delivering information for resource or environmental assessments, advice, and management.
- identify situations for which survey information, that is important for advice, management or assessment is presently missing or inadequate,
- initiate surveys to address the identified data gaps (e.g. by means of call for tenders, or the provision of additional ToRs for existing survey planning groups).

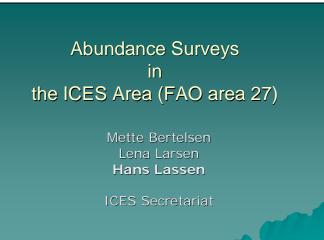
SGRN 07-01 suggests that the relevant scientific organizations implement such a scheme.

#### **6 REFERENCES**

- 1. Council Regulation (EC) N° 1543/2000 of 29 June 2000 establishing a Community Framework for the collection and management of the data needed to conduct the common fisheries policy OJ L 176, 15.7.2000, p.1.
- Commission Regulation (EC) N° 1639/2001 of 25 July 2001 establishing the minimum and extended Community programmes for the collection of data in the fisheries sector and laying down detailed rules for the application of Council Regulation (EC) N° 1543/2000 – OJ L 222, 17.8.2001, p.53.
- Commission Regulation (EC) N° 1581/2004 of 27 August 2004 Amending Regulation (EC) N°1639/2001 establishing the minimum and extended Community programmes for the collection of data in the fisheries sector and laying down detailed rules for the application of Council Regulation (EC) N° 1543/2000 – OJ L 289 27.8.2004, p 6.
- 4. Commission Staff Working paper: Implementation of the Community framework for the collection and management of data needed to conduct the common fisheries policy, 2004, COM (224) 225. 19 p.
- 5. Commission Staff Working Paper SEC (2000): Report of the STECF Sub-group on Research Need: Fisheries Data 2000 3p + annexes
- 6. Commission Staff Working Paper SEC (2003, 1415): Report of the STECF Sub-group on Research Need: Mid-term Review of Data Collection National programmes. Brussels, 7-11 July 2003, 85p.
- Commission Staff Working Paper SEC (2003, 101): Report of the STECF Sub-group on Research Need: Analysis of Derogations and no-conformities of National Data Collection Programmes for 2003 and further evaluation of Blackspot sea bream recovery plan. Brussels, 9-13 December, 69 p.
- 8. Commission Staff Working Paper SEC (2004, 179): Report of the STECF Sub-group on Research Need: Analysis of Derogations and non-conformities of Data Collection Programmes for 2004. Brussels, 1-5 December, 84 p.
- 9. Commission Staff Working Paper SEC (2005, 255): Report of the STECF Sub-group on Research Need: Analysis of derogations and non-conformities of Member States data collection National Programmes Proposal for 2005 (Brussels 29 Nov. 6 Dec.), 115 p.
- 10. Commission Staff Working paper: Report of the 3<sup>rd</sup> Regional Co-ordination Meeting for the Baltic (RCM Baltic), Lysekil, Sweden, 16-20 October 2005, 40 p + annexes.
- 11. Commission Staff Working paper: Report of the 3<sup>rd</sup> Regional Co-ordination Meeting for the North Sea and East Artic (RCM NSEA), The Hague, The Netherlands, 26-29 September 2006, 69 p + annexes.
- 12. Commission Staff Working paper: Report of the 3rd Regional Co-ordination Meeting for the North East Atlantic (RCM NEA), Lisbon, Portugal, 2-6 October 2006, 21 p + annexes.

- 13. Commission Staff Working paper: Report of the 3<sup>rd</sup> Regional Co-ordination Meeting for the Mediterranean Area (RCM Med), Valetta, Malta, 26-28 April 2006; 51 p.
- 14. Commission Staff Working paper: Report of the 2<sup>nd</sup> Regional Co-ordination Meeting for the NAFO area (RCM NAFO), Lisbon, Portugal, 25-28 April 2006, 38 p.
- 15. Evaluation of Research Surveys in relation to Management Advice (EVARES-FISH/2001/02-Lot 1). Final Report to the European Commission Director General Fisheries. 305 p
- 16. ICES Working Document: Regional Abundance Surveys with input to the ICES Fisheries advice for the CFP. ICES Secretariat, February 2007. 21p.
- ICES Working Document: Confidence Limits Estimation of Abundance Indices from Bottom Trawl Survey Data: Implementation in DATRAS. ICES Secretariat, February 2007. 49p.
- 18. ICES Document: Answer to special request on Anchovy surveys in the Bay of Biscay: ICES Advice 2006 Volume 7. pp.11-18.
- 19. ICES Comments on surveys on deep-sea species. Letter 9 June 2006, 7p.
- 20. ICES Document: Overview of long-time benthic fauna surveys in the ICES area. Letter 16 Dec. 2005, 14p.
- 21. MEDITS. 2007. Assessment of indicator trends related to exploited demersal fish populations and communities in the Mediterranean. DCR Medits Working group. Nantes (France), 15-18 March 2005 and Kavala (Greece), 2-6 April 2006. Available at http://www.ifremer.fr/docelec/default-en.jsp. 168p.
- 22. Relini, G. 2007. Demersal Trawl Surveys in Italian Seas: a short review. 20p.+ figures and Annexes.

#### **ICES Presentation to SGRN 07-01**



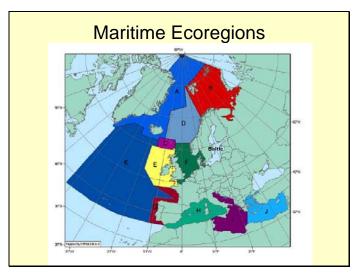
## Restrictions

- EU waters within FAO area 27
- Stocks outside EU waters
  - Cod in in Subarea XIV, (NAFO 1A-1F)
  - Redfish in Subareas V+XII+XIV
  - Greenland halibut in Subareas V+XIV
- Fish compartment of the marine ecosystem
- Focusing on quantitative information

## ICES did not consider

- Deep water
  - NEAFC request, on-going process in ICES
- ♦ Salmon
- ♦ Eel
- Tunas and swordfish
- Stocks around Iceland (Va), Faroe Islands (Vb), and in the Barents Sea (I+II)





## ICES The Home for

- Coordinated Planning of major international surveys
- Surveys used in the advisory process
- International database (DATRAS)
- Assessment of fish stocks and fisheries
- Advice on fishery management

## DCR is in support for the CFP

- Abundance fishing surveys have several roles within this scope
  - Ecosystem overviews Status of the fish assemblages – input to an ecosystem Approach
  - Abundance indices in estimation of stock status
  - Pre-recruit estimates in projections of fishing possibilities
  - Mapping spatial distribution (by size/age)
  - Platform for sampling whatever

## Fisheries vs Survey data

- The Information basis fishery advice
   Sampling Fisheries
  - Fisheries independent data (Surveys) Fisheries data (Catch, Joghooks, V/V
- Fisheries data (Catch, logbooks, VMS) are much cheaper per information unit than abundance survey data
- Fisheries do not covering an ecoregion but focus on high abundance areas
- Examples where fisheries data (unreliable) have been discarded
  - Eastern Baltic cod
  - West of Scotland Demersals

## ICES Approach Restricted to the fish community

- Need for an overview of each ecoregion general purpose – bottom trawl
- High priority stocks for which we need an analytical assessment
  - "tuning" index
  - pre-recruit index
  - Can the general purpose survey provide such abundance indices?
- If not, specialised surveys

One coordinated survey is better than several uncoordinated

## ICES Approach International Coordinated Surveys

- Cost-effective reduce inter-survey variability
- Central database International access to data (e.g. DATRAS)
- Sharing working up samples sharing expertise
- Standard data analysis transparency peer review of survey procedures
- Possibility for back-up among partners in case of problems

## Examples of uncoordinated Abundance surveys

- Blue whiting (involves EU, and some non-EU members: Faroe Islands, Iceland, Norway, Russia) partly uncoordinated
- Anchovy in the Bay of Biscay
- Whiting in the Irish Sea (Division VIIa)

# Providing bricks for puzzling together the value of each survey

#### ♦ Reports

- Regional Abundance surveys with input to the ICES Fisheries advice for the CFP
- Confidence limits estimation of abundance indices from Bottom Trawl Survey Data – Implementation in DATRAS
- Overview maps of surveys in DATRAS
- Overview maps of surveys not in DATRAS
- ICES WGs use of surveys in assessments



Technological approach	Information	Example	Comment		
Bottom otter trawl	Quantitative abundance indices for demersals	IBTS, BITS	Can be used to provid general overviews of a component of the fish occurring in the area		
Beam trawl and dredges	Quantitative abundance indices for flatfish	BTS	Flatfish and sedentary species (e.g. mussels)		
Acoustic combined with trawling	Quantitative abundance indices (or absolute estimates) for pelagics	North Sea Herring in the North Sea and in the Norwegian Sea	Pelagic fish: anchovy, sardines, herring sprat		
Video Survey	Quantitative Bottom dwelling species (e.g. Nephrops)	TV surveys for Nephrops around the British Isles	Nephrops (shrimps?)		
Egg-Larvae	Spawning Stock biomass for both demersal and pelagics	DEPM (Anchovy and sardines), Mackerel and horse mackerel three- annual egg survey	Only SSB		

Ecosystem	Bottom trawl Survey	Beam Trawl	Acoustic	Video	Egg-Larvae
Baltic Sea	BITS	Flatfish not a major component of the ecosystem	BIAS (herring and sprat)	Not relevant	herring
North Sea	IBTS	BTS	Herring	Nephrops	Herring larvae
Celtic Seas	IBTS	BTS	Herring	Nephrops	herring
Biscay and Iberian Seas	EVHOE, IBTS	-	Anchovy, sardine	-	Anchovy and sardine
Widely migratory stocks	Groundfish survey	Not relevant	International blue whiting Spawning Stock Acoustic Survey, Herring	Not relevant	Mackerel and Horse mackerel, herring

# Overview of surveys by ecoregion

## **DATRAS Surveys**

- Restriction in the range of information from a survey (gear, sampling strategy, area coverage)
- Relative Uncertainty decreases with increasing abundance, mainly juveniles

COUNTRY		Po	TTOM TRAWL		BEAM TRAWL	
COUNTRY	BALTIC	NORTH SEA	WesternAreas (Scottish Groundfish Surveys)	Southern Areas (EVHOE)	North Sea	
Belgium					S	
Denmark	S,D	S,D				
England		S,D	S		S	
Estonia	S,D					
Finland	S,D					
France		S,D	S,D	S,D		
Germany	S,D	S,D			S	
Ireland			S			
Latvia	S,D					
Lithuania	S,D					
Netherlands		S,D			S,D	
Norway		S,D				
Poland	S,D					
Portugal				S		
Russia	S,D					
Scotland		S,D	S,D			
Spain			S	S		
Sweden	S,D	S,D				

#### New Council Regulation for the Data Collection

#### Article 15 Access to and transmission of primary data

- 1. Member States shall ensure that the primary data incorporated into the national computerised databases are directly accessible by electronic means by the Commission for the purpose of verifying that the data exist.
- 2. Without prejudice to the obligations established by other Community rules, Member States shall conclude agreements with the Commission relating to computer access in order to guarantee direct access to their databases.
- 3. Member States shall ensure that the primary data collected under the surveys at sea schemes are transmitted to international scientific organisations and appropriate scientific bodies within regional fisheries organisations in accordance with the international obligations of the Community and the Member States.

#### New Council Regulation for the Data Collection

#### Article 19 Data transmission procedure

- 1. Member States shall transmit detailed and aggregated data in a secure electronic format.
- 2. Where detailed and aggregated data are requested for publication in research journals or for educational purposes, Member States may, in order to protect the professional interests of the data collectors, withhold data transmission to the end-users for a period of two years following the date of collection of the data. Member States shall inform the end-users and the Commission of any such decisions. In duly justified cases the Commission may authorise that period to be extended.
- 3. Member States may refuse to transmit the relevant detailed and aggregated data only:
  - (a) if there is a risk of natural persons and/or legal entities being identified in which case the Member State may propose alternative means to meet the needs of the end-user which ensure anonymity;
  - (b) in the cases referred to in Article 21(2)
- 4. In cases where the data requested by end-users other than relevant international scientific organisations and appropriate scientific bodies within regional fisheries organisations are different from those already provided to international scientific organisations and appropriate scientific bodies within regional fisheries organisations, Member States may charge those end-users the actual costs of extraction and, if required, aggregation of the data before their transmission.

### Table of surveys prepared by experts from the Mediterranean countries

Name of the survey	Acronym	Member States/Institutes involved in the	Area	Period	Demersal / Benthic/Pelagi c/ Icthyo	Objectives for scientific advice/stock assessments	Other main objectives (Ecosystem approach, etc,)	Su	arvey effort	Use of the survey outcomes	Stocks for which the survey is used as tuning fleet	Age group and variance explained by the survey (in %)	Other outcomes/uses	Current
		survey (leader in bold)		(Months)	(D/B/P/I)	(Targetted stocks )		days	hauls	Name of the Stock Assessment WG	as tuning neet			Priority
Iberian Coast Acoustic Survey	ECOMED	ES	GSA 1, 6	4 quarter / October- November	Pelagic	Abundance estimates for anchovy and sardine; biological parametes	Abudance estimates for other pelagic species (horse mackerel, mackerel etc.) geographic distribution and size structure distribution of anchovy and sardine populations, collection of oceanographic data	30	30000 km2	Stock assessments and management advices / Small Pelagic WG of Subcommittee for Stock Assessment (SCSA) of Scientific Advisory Committee (SAC) of GFCM			Stocks for which data have been used by SAC/GFCM or STECF (SGMED): European anchovy GSA 3-6; Sardine 3-6;; Mackerel GSA 3; Horse mackerel GSA 3;	2
Gulf of Lions acoustic survey	PELMED	FR	GSA 7	3 quarter / July	Pelagic	Abundance estimates for anchovy and sardine; biological parametes	Abudance estimates for other pelagic species (horse mackerel, mackerel etc.) geographic distribution and size structure distribution of anchovy and sardine populations, collection of oceanographic data	25	14000 km2	Stock assessments and management advices / Small Pelagic WG of Subcommittee for Stock Assessment (SCSA) of Scientific Advisory Committee (SAC) of GFCM			Stocks for which data have been used by SAC/GFCM or STECF (SGMED): European anchovy GSA 7; Sardine GSA 7;	2
Sicilian Channel acoustic survey	ANCHOVY	IT, ML	GSA 15, 16	2-3 quarter / June-July	Pelagic	Abundance estimates for anchovy and sardine; biological parametes	Survey made in connection with eggs and larvae and oceanographic data to relate recruitment with oceanographic feature of the region	25	1000 nm / 3500 nm2	Stock assessments and management advices / Small Pelagic WG of Subcommittee for Stock Assessment (SCSA) of Scientific Advisory Committee (SAC) of GFCM			International Coordination through FAO MEDSUDMED and the CCPM/SAC/SSA WG on small pelagic, programme linked to ecological studies on the circulation in Sicilian Channel. Stocks for which data have been used by SAC/GFCM or STECF	not present in DCR but carried out o since 1998
Adriatic acoustic survey		IT, SL, non member states: Croatia, Montenegro, Albania	GSA 17, 18	3 quarter / July- September	Pelagic	Abundance estimates for anchovy, sardine and sprat; biological parametes	Geographic distribution and size structure distribution of anchovy and sardine populations; abudance estimates for other pelagic species (horse mackerel, mackerel etc.), collection of oceanographic data	30	2500 nm / 20000 nm2	Stock assessments and management advices / Small Pelagic WG of Subcommittee for Stock Assessment (SCSA) of Scientific Advisory Committee (SAC) of GFCM	anchovy in GSA 17		International Coordination through FAO ADRIAMED programme and the CGPM/SAC/SCSA WG on small pelagic. Stocks for which data have been used by SAC/GFCM or STECF (SGMED) European anchovy GSA 17-18; Sardine GSA 17-18; Start GSA	d in DCR but carried out since 1975
Aegean acoustic and egg production survey	ANCHOVY	EL	GSA 22	2 quarter / June	Pelagic	Abundance (acoustic) estimates for anchovy and sardine, DEPM Spawning Stock Biomass estimate for anchovy; biological parametes	Geographic distribution and size structure distribution of anchovy and sardine populations; spawning areas and fecundity estimates for anchovy, collection of oceanographic data	30	31000 km2	Stock assessments and management advices / Small Pelagic WG of Subcommittee for Stock Assessment (SCSA) of Scientific Advisory Committee (SAC) of GFCM			FAO EASTMED programme and the CGPM/SAC/SCSA WG on small pelagic. Stocks for which data have been used by SAC/GFCM or STECF (SGMED)	n 2
Pan-Mediterranean pelagic survey	MEDIAS	ES, FR, IT, EL, ML, SL; and non member states	GSA 1, 6, 7, 15, 16, 17, 18, 22	2-3 quarter / June-July	Pelagic	Abundance estimates for anchovy, sardine and sprat; biological parametes	Geographic distribution and size structure of anchovy and sardine populations; abudance estimates for other pelagic species (horse mackerel, mackerel etc.), collection of ecosystem and oceanographic data	140	145000 km2	Stock assessments and management advices / Small Pelagic WG of Subcommittee for Stock Assessment (SCSA) of Scientific Advisory Committee (SAC) of GFCM			International Coordination through FAO COPEMED, ADRIAMED, MEDSUDMED and EASTMED programs, the CGPM/SAC/SCSA WG on small pelagic and the 6th Framework STREP program	not present in DCR
Mediterranean International bottom trawl survey	MEDITS	ES, FR, IT, EL, ML, SL; CY, non member states: Croatia, Montenegro, Albania, Morocco,	GSA 1, 5, 6,7,8,9,10,16,15,19 ,18,17, 20, 22, 23,25	2-3 Quarter/ June-July	Demersal	Abundance index for demersal species, preliminary tuning indices for hake, red mullet etc.,	Indicators for ecosystem approach, biodiversity information, biological sampling (mudule H and I)	330	1100	Stock assessments and management advices / Demersal WG of Subcommittee for Stock Assessment (SCSA) of Scientific Advisory Committee (SAC) of GFCM	Preliminarly for hake in GSA 5, 6 and 7, red mullet in GSA 5 and 6	no	Data are collected on a total of 38 species, with 10 target species. Important monitoring trend of biomasses for all the stocks were historical commercial catch information is lacking or missing, work on analytical stock assessments based only trawl	
Autumn Bottom Trawl Survey Central Mediterranean	GRUND	IT, ML, SL, + non member states: Croatia, Montenegro, Albania	GSA 9, 10, 11,15,16,17,18, 19,	4 quarter / October- November	Demersal	Abundance index for 38 demersal species, 10 target species, recruitment indices, mortality, complementation in auturnn of the MEDITS survey, longest data series in Mediterranean bottom tral surveys (since 1982)	Indicators for ecosystem approach, biodiversity information, biological sampling (module H and I), identification of nursey areas	150	750	Stock assessments and management advices / Demersal WG of Subcommittee for Stock Assessment (SCSA) of Scientific Advisory Committee (SAC) of GFCM			Data on 38 species and 10 target species have been collected since 1985. International Coordination through FAO ADRIAMED and MEDSUDMED programmes. Stocks for which data were used by SAC/GFCM and STECF (SGMED): Red Mullet GSA 9-10	у

### ANNEX I EXPERT DECLARATIONS

Declarations of invited experts are published on the STECF web site on <u>https://stecf.jrc.ec.europa.eu/home</u> together with the final report.

**European Commission** 

#### EUR 23654 EN – Joint Research Centre – Institute for the Protection and Security of the Citizen

Title: Scientific, Technical and Economic Committee for Fisheries. Report of Working Group on Research Needs. Review of list of surveys at sea (Appendix XIV OF EU Commission Regulation N°1581/2004) with their priorities (SGRN 07-01).

Author(s): Bowering R., Bertelsen M., Lassen H., Larsen L., Van Beek F., Lordan C., Dalskov J., Raid T., Rohlf N., Zimmermann C., Reid D., Newton A., Darby C., Bertrand J., Arneri E., Gil de Sola L., Vazquez A., Pestana G., Di Natale A., Cardinale M., Beare, D., Hölker, f. & Somarakis S.

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#### Abstract

SGRN-07-01 was held on 12-16 February 2007 in Brussels. The report describes the operational prioritisation criteria for fisheries surveys at sea necessary for the compilation of a list of surveys at sea to be considered for co-funding by the new Data Collection Regulation (DCR). STECF expressed its opinion on the report during its the plenary meeting in April 2007.

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