

## JRC SCIENTIFIC AND POLICY REPORTS

## Scientific, Technical and Economic Committee for Fisheries (STECF)

## Review of DC-MAP – Part 2 (STECF-13-12)

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This report was reviewed by the STECF during its' 43<sup>th</sup> plenary meeting held from 08 to 12 July 2013 in Copenhagen, Denmark

Report EUR 26095 EN



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JRC 83566

EUR 26095 EN

ISBN 978-92-79-32528-1

ISSN 1831-9424

doi: 10.2788/96031

Luxembourg: Publications Office of the European Union, 2013

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How to cite this report:

Scientific, Technical and Economic Committee for Fisheries (STECF) – Review of DC MAP – Part 2 (STECF-13-12). 2013. Publications Office of the European Union, Luxembourg, EUR 26095 EN, JRC 83566, XXX pp.

Printed in Italy

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

#### **Review of DC-MAP – Part 2 (STECF-13-12)**

## THIS REPORT WAS REVIEWED DURING THE PLENARY MEETING HELD IN COPENHAGEN, DENMARK, 9-13 JULY 2013

#### **Request to the STECF**

STECF is requested to review the report of the STECF Expert Working Group meeting, evaluate the findings and make any appropriate comments and recommendations.

STECF is also requested to advice on planning of next steps (drafting of the external reference documents; involvement of end-users; preparation of guidelines on EMFF OPs and AWPs; issues resulting from the 1st meeting).

#### **STECF observations**

EWG 13-05 was a follow up meeting from the EWG 13-02 DCMAP I meeting held in April 2013. The conclusions from the first meeting were considered as the starting points for the discussions. In addition a consultation document, prepared by the EC, a number of working documents on related issues and the reports from a number of ad-hoc contracts were provided to the EWG as input to the meeting (http://stecf.jrc.ec.europa.eu/web/stecf/ewg1305).

The consultation document "EU Data Collection for Fisheries 2014-2020" provided to the EWG by the EC is composed of four building blocks: block A is stating the general principles, established by the political compromise on the basic regulation; block B defines the contents of the common core data collection programme applicable for the next 7 years; block C defines the MS obligations, and block D defines the contents of the Master Reference Register (MRR), the flexible part of the data collection programme. The EWG 13-05 focused on block B and D of the consultation document and provided comments to the content of the document by track changes in the text. These are provided in the annex of the EWG 13-05 report.

STECF notes that while the EWG 13-05 was not able to fully address all of the extensive list of items in its terms of reference the EWG 13-05 Report contains novel proposals that provide the foundations of a future DC-MAP. STECF suggests that following feedback from the Commission, further development of the present proposals and any outstanding issues could be addressed during the forthcoming EWG 13-18 meeting which is scheduled for 25-30 November 2013. STECF stresses, that to make effective progress, it is essential that STECF receives feedback from the Commission on both the EWG 13-05 Reports.

**EXPERT WORKING GROUP EWG-13-05 REPORT** 

## **REPORT TO THE STECF**

## EXPERT WORKING GROUP ON REVIEW OF DC-MAP – PART 2 (EWG-13-05)

Varese, Italy, 10-14 June 2013

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

## **1 EXECUTIVE SUMMARY**

The starting point for the EWG 13-05 was the Consultation Document "EU Data Collection for Fisheries 2014-2020, Consultation document, 4 June 2013" presented by the Commission. The Consultation Document is composed of 4 building blocks: Block A is stating the general principles, established by the political compromise on the Basic Regulation; Block B defines the contents of the Common Core Data Collection programme applicable for the next 7 years; Block C defines the MS obligations, and Block D defines the contents of the Master Reference Register, the flexible part of the data collection programme.

The EWG 1305 focused on Block B and D of the Consultation Document and this report constitutes of comments and proposals for amendments to the two Blocks, organised according to the following headings:

- 1. Data required for assessing the level of fishing transversal data, chapter 4.
- 2. Data required for assessing the state of exploited marine biological resources and the impact of fishing activities on the marine biological resources, chapter 5.
- 3. Data required for assessing the impact of fishing activities on the marine ecosystem, chapter 6.
- 4. Data required for assessing the social and economic performance of fisheries, aquaculture and processing sector, chapter 7.

Most of the transversal data to be collected under the current DCF is in practice collected according to other regulations and one of the objectives of the DC-MAP is to avoid duplication of work. The EWG 13-05 stresses that in order to meet this objective it is important that the bodies responsible for the DC-MAP have timely access to the data collected under the other regulations and that this is addressed explicitly in the DC-MAP.

In regarding to sampling of biological variables the EWG 13-05 suggests that the data to be collected is based on analyses of end users need. The proposal presented in Annex 1 is based on the ICES' consultation response on end user data needs. This was the only response available to the EWG 13-05 that was sufficiently specific to permit the sort of use that group have made of it. The ICES example shall be considered illustrative of the approach taken by the expert group.

The EWG13-05 presents the possible research surveys at sea to be included in the DC-MAP in three tables. The first table (Appendix VIII to Annex 1) lists the surveys which are eligible in the DCF. The second table (Appendix IX to Annex 1) lists the surveys proposed by RCMs which are not eligible under the DCF. The third table (Appendix X to Annex 1) lists all other surveys included in the ICES feedback document to the DC-MAP which are not included in any of the two previous tables.

The EWG 13-05 suggests that all surveys included in the DC-MAP should be subject to evaluation periodically and that new surveys, or modification in already included surveys, should be accepted based on documentation of end user needs not already covered by existing surveys.

EWG 13-05 is of the opinion that in the list of surveys, which will be included in the DC-MAP, a reference should be included identifying the Member States which should contribute to each survey. The identification of these Member States should follow the rules as recommended by STECF 13-01 (EWG 12-15).

Article 37 of the CFP Political Agreement states that Member States shall collect biological as well as environmental data necessary for fisheries management in order to enable the assessment of (a) the

state of exploited marine biological resources and (b) the level of fishing and the impact that fishing activities have on the marine biological resources as was on marine ecosystems.

In order to fulfill the provisions of Article 37 and align the DC-MAP with obligations under other existing EU legislative instruments, provisions for monitoring and reporting by-catch of non-fisheries by MS will thus be required in the DC-MAP.

EWG 13-05 considers that the DC-MAP should primarily aim to fulfill end-user needs. Whilst dedicated by-catch monitoring programmes for sensitive species will provide improved data on bycatch and thus allow for improved estimates on the extent of fisheries by-catch, it is pertinent to note that: i) by-catch data collected under the DC-MAP will not be sufficient to estimate the impact of indicental catches on populations of the species monitored. Additional data on population size would be required; ii) when high impact fisheries (fisheries with high by-catch of non fisheries species) have been identified, rather than collecting highly accurate data on the extent of fisheries by-catches, financial resources under the EMFF may be better allocated to (a) fund studies on mitigation measures, (b) monitor the effectiveness of such mitigation measures, and (c) to assist fishers in allocating increased resources to the use of more environmentally fishing gears; and iii) the cost implications as well as the administrative burden of designing dedicated monitoring programmes for each of the by-catch species are enormous. In order to render the DC-MAP practically feasible, priorities should priorities should be set based on feedback from end-users.

Bearing in mind the issues outlined above, EWG 13-05 considers that two different approaches may be taken with regards to MS obligations on monitoring and reporting by-catch of protected non-fisheries species.

<u>Option I:</u> The DC-MAP could include provisions for MS to sample by-catches of certain conspicuous and sensitive non-fisheries species, for which there are end user needs, in existing sampling programmes which make use of obervers at sea.

<u>Option II:</u> The DC-MAP could include provisions for MS to sample by-catches of certain conspicuous and sensitive non-fisheries species, for which there are end user needs, based on dedicated sampling programmes.

Environmental indicators to assess the impact that fishing activities have on the marine ecosystem are currently listed in DCF Annex XIII. Additional indicators exist under the Marine Strategy Framework Directive (MSFD; 2008/56/EC) and the Oslo and Paris Convention (OSPAR) and Helsinki Commission (HELCOM) for the protection of the marine environment of the North-East Atlantic and the Baltic Sea.

Given the extensive list of indicators and the potentially enormous demand for associated data, the EWG 13-05 suggests that before a decision to specify data collection requirements in relation to environmental indictors in the DC-MAP is taken, end-users first need to agree a priority list of indicators to suit their needs. The EWG 13-05 considers that priority for data collection under the DC-MAP should be given to those indicators that have been tested and proven to be suitable for measuring the impact of fishing activities on the marine ecosystem.

The sections on economic and social data collections in the Consultation Document "EU Data Collection for Fisheries 2014-2020, Consultation document, 4 June 2013" were reviewed and possible changes inserted (see Annex 1 chapter IV).

From previous meetings of PGECON and STECF EWG there is general agreement that for economic and social data it is necessary to maintain a EU wide centralised database at JRC in order to provide to end user a comprehensive overview of the economic performance of the fishing, aquaculture and processing sectors.

The lists of variables proposed by the EWG 13-05 (Appendices X, XI, XII and XIII) are based on a new approach. Core variables are now in principal those variables which were identified by EWG 13-01 as necessary. A few other variables are included as optional which EWG 13-01 put under level B (lack of variable has more disadvantages than advantages) and C (nice to have but expensive to get).

In the current DCF collection of data for fresh water aquaculture is not mandatory. This leads to the situation that some MS are covering all aquaculture production, while information from other fresh water aquaculture producers is missing. In order to be able to evaluate the economic performance of the aquaculture sector and the analysis of developments on fish markets the EWG 13-05 suggests that the new DC-MAP shall include data collection on the whole aquaculture sector. EWG-13-05 suggest to limit the data collection to 'commercial' production or set a limit of the total production to be covered.

It can be discussed if there is added value for a separate data collection on the fish processing industry in DCF/DC-MAP on top of data collection for Eurostat. Many countries report data from their National Statistical Offices as fish processing if an industry is covered by the Structural Business Statistic. However, the information does not necessarily allow an identification of fish processing activities and the data may not be representative for the fish processing.

STECF has several times suggested a study on the costs and feasibility of data collection of volume of raw material to be able to assess the link between the fishing fleet and the processing sector. Such a study is still not done. EWG 13-05 again strongly suggests doing such a study as soon as possible.

## **2** INTRODUCTION

In parallel with the development of the new Basic Regulation on the Common Fisheries Policy and the Regulation on the European Maritime and Fisheries Fund (EMFF), the Commission is currently preparing a proposal for a revision of the Data Collection Framework (Council Regulation (EC) No. 199/2008) and a new EU Multi-Annual Programme for data collection for the period 2014-2020 (EU DC-MAP). Articles 37 of the proposal for a Basic Regulation on the Common Fisheries Policy set out the broad obligations for Member States to collect biological, technical, environmental and socio-economic data and to cooperate regionally. The EMFF will serve as the financial pillar of the future EU data collection programme.

Member States will outline the data collection activities to be implemented under the DC-MAP in the EMFF Operational Programme chapter on data collection (Article 20(o) of the EMFF Proposal) and in Annual Work Plans (AWPs) (Article 23 of EMFF Proposal).

#### 2.1 Terms of Reference for EWG-13-05

EWG 13-05 was requested to:

- 1. Review of the draft DC-MAP presented by the Commission at the meeting (Consultation Document "EU Data Collection for Fisheries 2014-2020, Consultation document, 4 June 2013").
- 2. Review an analysis of data calls in terms of timing and contents of calls to be presented by the Commission.
- 3. Review the glossary of economic terms to be presented by the Commission.
- 4. Review outcomes of PGECON.
- 5. Review outcomes of the Workshop on transversal data & small-scale fisheries.

- 6. Identifying next steps.
- 7. A.O.B.

## **3** BASIS FOR THE WORK OF EWG 13-05.

Article 37 of the CFP (final compromise text of 11 June 2013, PECHE 245/CODEC 1359) states that Member States shall, in accordance with the rules adopted in the area of data collection, collect biological, environmental, technical, and socio-economic data necessary for fisheries management, manage them and make them available to end users of scientific data, including bodies designated by the Commission.

The data shall in particular enable the assessment of:

- the state of exploited marine biological resources,
- the level of fishing and the impact that fishing activities have on the marine biological resources and on the marine eco-systems, and
- the socio-economic performance of the fisheries, aquaculture and processing sectors within and outside Union waters.

The EWG 13-05 used the above text as guidelines for the data to be included in the DC-MAP and the work of the expert group was organised according to the following headings:

- Data required for assessing the level of fishing transversal data, chapter 4.
- Data required for assessing the state of exploited marine biological resources and the impact of fishing activities on the marine biological resources, chapter 5.
- Data required for assessing the impact of fishing activities on the marine ecosystem, chapter 6.
- Data required for assessing the social and economic performance of fisheries, aquaculture and processing sector, chapter 7.

The starting point for the EWG 1305 was the Consultation Document "EU Data Collection for Fisheries 2014-2020, Consultation document, 4 June 2013" presented by the Commission. The Consultation Document is composed of 4 building blocks:

- Block A is stating the general principles, established by the political compromise on the Basic Regulation.
- Block B defines the contents of the Common Core Data Collection programme applicable for the next 7 years. These provisions will be the basis for the Data Collection Multi-Annual Programme (DC-MAP).
- Block C defines the MS obligations.
- Block D defines the contents of the Master Reference Register, the flexible part of the data collection programme.

The EWG 1305 focused on block B and D of the consultation document and Annex 1 of the report of EWG 1305 constitutes comments and proposals to the two blocks. The expert group was not able within the available time to address block C.

STECF EWG 13-05 furthermore reviewed the proposed list of key terms as compiled under an ad-hoc contract in April 2013 (Fiche on the Data Collection Multiannual Programme 2014-202, Definition of key terms, "June 2013, 2013-05-17 Fiche definitions key terms.doc

#### 4 DATA REQUIRED FOR ASSESSING THE LEVEL OF FISHING - TRANSVERSAL DATA

The EWG 13-05 reviewed the section of the Commission Decision (2010/93/EU) on transversal variables.

The present DCF regulation (Council Regulation 199/2008) includes provisions obliging the Member States to collect information on catches and fishing effort. Although these data are core data for the present DCF they are mainly collected according to other regulations. Information on fleet capacity is recorded according to the Fishing Fleet Register regulation (Council Regulation 26/2004) and information on catches and effort according to the Control Regulation (Council Regulation 1224/2009 and its implementation regulation Commission Regulation 404/2011).

The new CFP basic regulation article 37 prescribes that duplication of work should be avoided. One way to ensure this is not to require that these data are collected under the DC-MAP but only that the data should be made available for DC-MAP purposes. The EWG, however notes that there may be cases where some of the data in question is not available or the quality of the data collected under the other regulations does not meet the requirements in the DC-MAP. In such cases it may be appropriate to include the commitment to collect the data in the DC-MAP. Justification in doing so should be given by the Member States. Before such a step is taken it should be investigated if it is possible to improve the quality in the primary data source.

Access to data collected according to the control regulation has been discussed at several RCMs and the ICES PGCCDBS for years<sup>1</sup>. The lack of access to these data in some Member States hinders cost efficient data collection and in several Member States duplication of collection of data has been carried out. The EWG stresses that in order to carry out cost efficient data collection those institutes, agencies or organizations designated by the body in charge of the implementation of the national programme should have timely access to all primary data fleet register information, special fishing permits information, fishing authorization information, logbook information, sales notes information, VMS information and information collected for vessels not carrying logbooks such as data from control sampling plan. The suggested variables to be available and the regulations concerned are given in Annex 1 chapter I.

# **5** DATA REQUIRED FOR ASSESSING THE STATE OF EXPLOITED MARINE BIOLOGICAL RESOURCES AND THE IMPACT OF FISHING ACTIVITIES ON THE MARINE BIOLOGICAL RESOURCES.

This chapter addresses the end user need for data to assess the state of exploited marine biological resources and the impact fishing may have on them. The chapter is split in two. The first part deals with the sampling of biological variables while the second part discusses the research surveys at sea required to deliver the data needed.

#### 5.1 Sampling biological variables

The comments of EWG 13-05 on the sections of building Block B of consultation document on EU Data Collection for Fisheries 2014 - 2020 dealing with biological variables are given in Annex 1 chapter II section A. The comments are based on the ICES' consultation response on end user data needs. This was the only response available to the EWG 13-05 that was sufficiently specific to permit the sort of use that group have made of it. Other regional management or advisory groups will need to

<sup>&</sup>lt;sup>1</sup>STECF 13-01, STECF 13-06, STECF-12-01, STECF 11-02, STECF EWG 12-01, STECF-12-15, MRAG report 2012, PGCCDBS 2011, PGCCDBS 2010,

specify something along the same lines specific to their own needs. The ICES example shall be considered illustrative of the approach taken by the expert group.

The data needs for eel and salmon was not addressed by EWG 13-05 because of time constraints. The needs for eel should address the evaluation of changes in the stock situation on an European level and the evaluation of effectiveness of the national management plans. The management plans differ by management area and the data needs may differ by area. Under the DCF only sampling of the fishery is an eligible activity. However, many national recovery plans include closures of the fishery and monitoring has moved from fishery dependent to fishery independent data.

#### 5.2 Research surveys at sea

The comments of EWG 13-05 on the sections of building Block B of consultation document on EU Data Collection for Fisheries 2014 - 2020 dealing with research surveys at sea are given in Annex 1 chapter II section B.

The surveys concerned are provided in three tables.

The first table (Appendix VIII to Annex 1) lists the surveys which are eligible in the DCF. The list indicates which surveys have been evaluated by SGRN 10-03 (column "Evaluated by SGRN 10-03) and the score given by SGRN (column "SGRN 10-03 score). The lower the score, the more important the survey. The lowest score which can be given is 1. Column "Used in assessments/source" indicates whether the end-user has provided feedback on the survey and whether the survey is used in assessments.

The second table (Appendix IX to Annex 1) lists the surveys proposed by RCMs which are not eligible under the DCF. Some of them has been evaluated by RCGM 10-03, most of them not.

The third table (Appendix X to Annex 1) lists all other surveys included in the ICES feedback document to the DC-MAP which are not included in any of the two previous tables. Most of them have not been proposed for eligibility and have not been evaluated. A few surveys in this list have been proposed and evaluated but rejected for eligibility.

All surveys in the DC-MAP reference list should be subject to evaluation periodically to ensure they are still useful and provide value for money. Newly proposed surveys, or modification in current surveys, should cover end-user needs which are not covered by the present surveys or improve quality. These surveys could be evaluated simultaneously with the existing surveys or separately. The proposed text leaves the initiative to the Commission to start this evaluation process and define the frequency of evaluation.

In the past there have been a few occasions that Member States have pulled out of a survey or made changes in the survey design (gear) on its own initiative. This may negatively affect the contribution of other Member States to the survey. A provision has been included in the proposed legislative text to introduce a commitment that this will not happen.

EWG 13-05 is of the opinion that in the list of surveys, which will be included in the DC-MAP, a reference should be included identifying the Member States which should contribute to each survey. The identification of these Member States should follow the rules as recommended by STECF 13-01 (EWG 12-15). The recommendation of STECF 13-01 stated that for new surveys or surveys currently without participation of all Member States involved in the relevant fisheries, Member States having a share of minimum xx% (where xx% should be determined by the Commission) in landings of a stock covered under a survey shall participate in surveys

The procedures and provisions for financial assistance for surveys carried out under the DC-MAP will differ from the DCF. Surveys in the DCF list are evaluated by STECF and are mandatory for the

Member States to carry out. Surveys on this list are all eligible for co-financing by the Commission. Member States can carry out other surveys but only on their own expenses. Surveys listed under the DC-MAP will be mandatory and eligible for funding under the EMFF. In addition, Member States may propose other surveys in their Operational Programme. These surveys would also be eligible for funding under the EMFF when the Operational Programme has been approved. In addition, the Member State may carry out surveys at their own expenses (not funded under the EMFF). The changes in the financing of the surveys have consequences for the legislative text in the DC-MAP and have been taken into account in Annex 1.

## 6 DATA REQUIRED FOR ASSESSING THE IMPACT OF FISHING ACTIVITIES ON THE MARINE ECOSYSTEM.

#### 6.1 By-catch

The comments of EWG 13-05 on the sections of building Block B of consultation document on EU Data Collection for Fisheries 2014 - 2020 dealing with by-catches are given in Annex 1 chapter III section A.

Article 37 of the CFP Political Agreement states that Member States shall collect biological as well as environmental data necessary for fisheries management in order to enable the assessment of (a) the state of exploited marine biological resources and (b) the level of fishing and the impact that fishing activities have on the marine biological resources as was on marine ecosystems.

Member States are at present required to monitor and report the by-catch of certain non-fisheries protected species (including for example marine mammals, birds, marine turtles, sharks) under several EU instruments<sup>2</sup>, RFMO obligations and international agreements. Moreover under the Marine Strategy Framework Directive (2008/55/EC) the protection of sensitive species is recognised as an aspect which will contribute towards the achievement of Good Environmental Status (GES).

In order to fulfill the provisions of Article 37 of the CFP and align the DC-MAP with obligations under other existing EU legislative instruments, provisions for monitoring and reporting by-catch of non-fisheries by MS will thus be required in the DC-MAP.

EWG 13-05 considers that the DC-MAP should primarily aim to fulfill end-user needs. Whilst dedicated by-catch monitoring programmes for sensitive species will provide improved data on by-catch and thus allow for improved estimates on the extent of fisheries by-catch, it is pertinent to note that:

- By-catch data collected under the DC-MAP (number of individuals, fishery/fishing trip information, use of mitigation device) will not be sufficient to estimate the impact of indicental catches on populations of the species monitored since data on biological parameters on these protected non-fisheries species (i.e. information on population size and trends) and sightings at sea are not collected under a by-catch monitoring system as part of the DC-MAP.
- Although precise estimates on the extent of the by-catch problem for sensitive non-fisheries species may at present not be available, considerable knowledge does already exist with

<sup>&</sup>lt;sup>2</sup> COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora COUNCIL REGULATION (EC) No 812/2004 of 26.4.2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98

DIRECTIVE 2009/147/EC of the European parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version)

regards to which fisheries are affected and may be causing the highest impacts. In regions where such data do not exist, MS could be asked to carry out pilot studies to identify high impact fisheries. Once such high impact fisheries have been identified, rather than collecting highly accurate data on the extent of fisheries by-catches, financial resources under the EMFF may be better allocated to (a) fund studies on mitigation measures, (b) monitor the effectiveness of such mitigation measures, and (c) to assist fishers in allocating increased resources to the use of more environmentally fishing gears. EWG 13-05 considers that this aspect should be carefully evaluated since monitoring by-catch through dedicated observer programmes at sea may proove to be very costly. Moreover, costs may further increase in the near future since the forseen discards ban may lead to a greater emphasis on port-based sampling schemes to monitor fisheries resources.

• The provision of monitoring 'the impact that fishing activities have on the marine ecosystem' listed in Article 37 of the CFP Political Agreement in principle covers all by-catch species, including less conspicuous species such as molluscs, anthozoans, echinoderms, etc. Recommendations to collect data on threatened species have been made by several end-user groups (e.g. ICES WGBYC recommends the collection of data on shads, lampreys and sturgeons). The cost implications as well as the administrative burden of designing dedicated monitoring programmes for each of these species are enormous. In order to render the DC-MAP practically feasible, priorities will have to be set based on feedback from end-users. Setting such priorities will ultimately ensure that data collected under the DC-MAP continues to enable scientists to assess the state of exploited marine biological resources.

Bearing in mind the issues outlined above, EWG 13-05 considers that two different approaches may be taken with regards to MS obligations on monitoring and reporting by-catch of protected non-fisheries species. Which option is selected should be based on a careful consideration of the financial resources required for implementation, and whether such information is in fact a necessary pre-requisite for the commencement of projects on designing effective by-catch mitigation measures.

<u>Option I:</u> The DC-MAP could include provisions for MS to sample by-catches of certain conspicuous and sensitive non-fisheries species, for which there are end user needs, in existing sampling programmes which make use of obervers at sea.

<u>Option II:</u> The DC-MAP could include provisions for MS to sample by-catches of certain conspicuous and sensitive non-fisheries species, for which there are end user needs, based on dedicated sampling programmes.

Both options are addressed in Annex 1.

#### 6.2 Environmental Indicators

Environmental indicators to assess the impact that fishing activities have on the marine ecosystem are currently listed in DCF Annex XIII. Additional indicators exist under the Marine Strategy Framework Directive (MSFD; 2008/56/EC) and the Oslo and Paris Convention (OSPAR) and Helsinki Commission (HELCOM) for the protection of the marine environment of the North-East Atlantic and the Baltic Sea.

Given that the lists of indictors referred to above are already extensive and that some indicators are still to be finalised and agreed, the EWG is of the opinion that there is no need to include a separate or additional list of indicators specific to the DC-MAP. Also a framework specifically dealing with data collection is not the appropriate place to introduce such indicators. Indictors to assess the impact of fishing activities should be integrated into an assessment of good environmental status (GES). Given

the extensive list of indicators and the potentially enormous demand for associated data, the EWG suggests that before a decision to specify data collection requirements in relation to environmental indictors in the DC-MAP is taken, end-users first need to agree a priority list of indicators to suit their needs.

In the absence of a priority list, the data requirements associated with each of such indictors and whether they are candidates for inclusion in the DC-MAP could not be specified during the present EWG meeting. Such data specifications need to be undertaken by an expert group with appropriate knowledge and expertise and be based on end-user priorities and needs.

Once the precise data specifications are available, the EWG considers that priority for data collection under the DC-MAP should be given to those indicators that have been tested and proven to be suitable for measuring the impact of fishing activities on the marine ecosystem. Ideally they will be based on data that are collected to monitor the state of exploited marine biological resources and will be suitable for most regions and sub-regions. Furthermore, it is highly desirable that the indicators agreed upon are associated with targets to be achieved so that progress towards achieving such targets can be monitored.

## 7 DATA REQUIRED FOR ASSESSING THE SOCIAL AND ECONOMIC PERFORMANCE OF FISHERIES, AQUACULTURE AND PROCESSING SECTOR.

The sections on economic and social data collections in the draft version of the consultation document were reviewed and possible changes inserted (see Annex 1 chapter IV). In the list of variables in Appendices XI, XII, XIII and XIV to Annex 1 suggestions for changes were introduced. In order to do that the group reviewed also the following background documents: PGECON draft report (May 2013, TOR 4), the draft report of the DCF workshop on transversal data in small scale fisheries (May 2013, TOR 5) and a draft version of the glossary of economic terms (TOR 3).

EWG 13-05 assumes that in the consultation document only the legally binding information on the variables will be included. All definitions and methodological specification can, therefore, be part of a document in the proposed MRR ('glossary'). Further work on this document is required as the actual version is not final and for several variables a consultation with EUROSTAT or Data Collectors from National Statistical Offices is necessary to have as much as possible a common understanding of the variables (especially relevant for aquaculture and fish processing).

From previous meetings of PGECON and STECF EWG there is general agreement that for economic and social data it is necessary to maintain a EU wide centralised database at JRC in order to provide to end user a comprehensive overview of the economic performance of the fishing, aquaculture and processing sectors. Over time DG MARE data calls for economic data have consolidated in regular data flows, it is therefore considered feasible and useful to replace data calls with the obligation to upload data to the centralised database at regular intervals and fixed deadlines included in the legal text, according to the periodicity for collection foreseen for each variable group in the DC MAP. PGECON can propose differentiated deadlines for the three sectors and a transition period for MS to reach them.

The deadlines and the specifications for the format of the data to be uploaded into the centralised database don't need to be included in the DC MAP since they don't pose specific obligation in relation to data collection. These specifications could be established at the centralised database in agreement between end users and data providers and changes should be kept to the minimum to maintain consistency of time series and reduce the burden for the re-processing of data. The level of aggregation of the social and economic data must be specified in the DC MAP as this will ensure the comparability, keep time series and allow the application of developed models (like FishRent) if data have to be provided at a more disaggregated level.

EWG 13-05 identified four major issues which had to be discussed to be able to give advice on the inclusion of certain variables in the new DC-MAP: the introduction of social variables, the spatial distribution of data, collections of data on fresh water aquaculture and the question of data collection on raw material for the processing industry. The two last issues are integrated in the specific chapters on aquaculture and fish processing data collection.

EWG 13-05 proposes a list of variables (see Appendices X, XI, XII and XIII) following a new approach. Core variables are now in principal those variables which were identified by EWG 13-01 as necessary. A few other variables are included as optional which EWG 13-01 put under level B (lack of variable has more disadvantages than advantages) and C (nice to have but expensive to get).

#### 7.1 Social variables

For some time now STECF and EWGs discussed the lack of social data to assess social developments. This is important as one of the aims of the CFP is to 'provide long-term sustainable environmental, economic and social conditions' (European Commission 2011) in the fisheries sector. The data on employment collected for DCF is only collected as data for employment as a production factor for the production units (vessel, farm or establishment), which means that this data are sampled as a part of the sampling plan for the production units. That means that the employment data are useful for analyses using data for these units, but not for analyses of the employed persons as such. Analyses of the persons related to the fish sectors need special datasets sampled based on the person related variables which should be analyzed. This could be the persons address instead of the address of the production unit; it could be the total income or the income from work at the production unit. I. e. spatial distribution based on DC-MAP data will be based on the address of the persons address. Therefore such analyses will not give sufficient data for areas special depending of fishery, aquaculture or fish processing.

EWG 13-05 suggests to include social indicators in the list of variables for the collection of data for the fishing, aquaculture and fish processing sector. In a first step more precise employment data are included in the list of variables (as core employment by age and by employment status (full-, part-time, seasonal), and as an optional variable employment by education level and nationality.

The regular data collection on employment will not change but as the detailed social data is not necessary to be collected on a yearly basis EWG 13-05 suggests collecting it twice during the program period.

Nevertheless, EWG 13-05 agrees with PGECON that before social data are included in the new DC-MAP a pilot study should be conducted how data should be collected, which data are available through common sources and what are the applications/end users and requirements. However the Commission should ask social scientists to conduct such pilot studies. In many MS there already exists person related data which could be useful for the different analyzes of the persons and their families related to the fish sectors. EWG 13-05 supports that such a survey(/study, see above) is made. As we propose to do the collection of social variables only twice in the program period a pilot study can be finalized before the first round of data collection and may lead to a few additional variables which may be collected.

#### 7.2 Spatial distribution of data

For several purposes (like impact assessment of long term management plans) specific information on the dependency of a region on the fishing sector (employment, gross value added, etc.) is necessary. In the past the EC launched a study every 10 years to assess the importance of the fishing sector for two regions in each MS. To have more regular information JRC is working on a method to use e.g. the fleet register data and information from the DCF economic data calls to assess regional clusters. MS should report this information on the basis of available sources. In this way no data collection activities will be eligible but only costs under section of "data management and data use".

#### 7.3 Aquaculture

In the current DCF all aquaculture sector is covered, however collection of data for fresh water aquaculture is not mandatory. This leads to the situation that some MS are covering all aquaculture production, while information from other fresh water aquaculture producers is missing. There are good reasons to collect economics data for total aquaculture production in the MS as so far a great portion of the fresh water aquaculture production is not reported. In order to be able to evaluate the economic performance of the aquaculture sector and the analysis of developments on fish markets EWG 13-05 suggests that the new DC-MAP shall include data collection on the whole aquaculture sector. EWG-13-05 suggest to limit the data collection to 'commercial' production or set a limit of the total production (like in the FADN-statistics in DG Agri where at least 90% of the value of total standard output shall be covered) and therefore a threshold should be implemented. EWG 13-05 also notes that in the transition period the costs may be relatively high as in many countries a lot of preparatory work will be necessary to collect the data for the first time. In the longer run this will be also a routine collection and then costs will be lower.

If the enterprise is taken as the production unit, then the revenues and costs from other activities of the enterprise that are not aquaculture (e.g. marketing, processing) may be reported in the data collected but separated from the revenues and costs from the aquaculture activity. The extraordinary revenues and costs could be used to avoid that these items appear in the economic performance estimation, or specific categories should be created to collect these data.

EWG 13-05 agreed to propose the following changes to the list of economic variables for the aquaculture sector (Appendix XII of Annex 1):

- The variable "*Extraordinary costs, net*" in the variable group "*Extraordinary costs, net*" to be replaced by "*Extraordinary costs*". The variable group "*Extraordinary costs, net*" to be named as "*Extraordinary costs*". The variable "*Extraordinary income*" to be added to the "*Income*" variable group.
- Replace the variable "*Financial costs, net*" from the variable group "*Capital costs, net*" by the variable "*Financial income*" to be placed in the variable group "*Income*" and "*Financial costs*" to be placed in the variable group "*Capital costs*".
- The variable "*Imputed value of* unpaid *labour*" to be named "*Value of unpaid labour*", because the term imputed is not needed.
- The variable "*Wages and salaries*" to be named as "*Personnel costs*", as it is used in the Structural Business Statistics (SBS). Then the variable group name "*Personnel costs*" needs to be renamed as "*Labour costs*" because in it there is also "*Value of unpaid labour*".
- The variable group and variable "*Other operational costs*" to be named as "*Other operating costs*", as it is used in SBS.
- Include a variable "Unpaid labour" to be able to include the owners in the total employment.
- The variable "*Total number of hours worked per year*" should be reported, added to the variable group "employment" in order to have a comparable unit to measure (among others) productivity across MS and overall.
- The variable "*Repair and maintenance*" should remain disaggregated and not to be included in "*Other operating costs*".

EWG 13-05 also propose the following changes in to the table on Sector segmentation to be applied for the collection of aquaculture data (Appendix XIII of Annex 1):

• In order to avoid misunderstandings between the production unit (enterprise or farm), it could be useful to replace the following categories in Appendix XI: "Fish farming techniques" to be

replaced by "Fish culture techniques", "Shellfish farming techniques" to be replaced by "Shellfish culture techniques" and "Land based farms" to be replaced by "Land based culture".

• It should be discussed how the current DCF Segmentation could be modified to align it with Eurostat segmentation. Our initial proposal is to have the segmentation by species further disaggregated to add the following segments "Tuna", "Eel" and "Algaes and other aquatic organisms". This last category could be further disaggregated if desired (to include for example, crustaceans, eggs for consumption and other organisms). Then the segment "Other shellfish" should be replaced by "Other molluscs". Current "farming techniques" could be replaced by the following "culture techniques" ("hatcheries and nurseries", "ponds", "tanks and raceways", "enclosures and pens", "cages", "recirculation systems" and "other methods") for all fish species (marine and freshwater); current technique segmentation ("raft", "long-line", "bottom" and "Other") could be kept for mollusc species (mussels, oyster and clams, and other molluscs) because current segmentation is more disaggregated and segments are economic significant. Then all culture techniques could be reported together for Algaes, eggs for consumption and other organisms under the name "all methods".

#### Outstanding issues

There are several issues that EWG 13-05 would propose to be discussed at the next STECF EWG 13-10 on the economic performance of the EU aquaculture sector:

- The statistical unit should be the enterprise (legal unit) or the farm (production unit)? That depends on what the end-users want to know. If the end-user is interested on the economic performance of the aquaculture sector (e.g. their profitability and economic robustness) then the statistical unit should be the enterprise. While, if the end-user is interested to know the socio-economic importance from a regional point of view, then there is the need to have the farm as the statistical unit. However, we are not sure if economic data disaggregated by farm could be obtained in all MS. Therefore, a study should be needed to address the feasibility of this data disaggregation.
- The variable "*Total value of assets*" from the "*Capital value*" variable group to be estimated as the total balance sheet or only considering the capital part (not the cash). While the former procedure would allow to properly estimate the financial position of the sector, the latter seems more adequate to estimate productivity indicators. Do not define total value of assets otherwise than what is common. If the financial position is excluded another word have to be used.
- Include "*Livestock in weight and value of stocks*" (stock at the end of the period) in order to know the stock variations. Reporting this data would allow to make the link between sales and production. This data may only be relevant for some of the segments.
- Subsidies for investments. Because it is the main subsidies item and important to track and evaluate the EMFF, among other sources. Currently it is only asked for direct subsidies.
- Consider to report the sales of the number of individuals (apart from currently reporting their weight and value) for some segments. This makes sense for some segments, especially hatcheries and nurseries), since weight can change significantly in a short period. Therefore, conversion factors are of reduced use in this particular case.

#### 7.4 Fish processing

There is a long discussion if there is added value for a separate data collection on the fish processing industry in DCF/DC-MAP on top of data collection for Eurostat. Many countries report data from their National Statistical Offices as fish processing as an industry is covered by the Structural Business Statistic. However, the National Statistical Offices allocate enterprises to the NACE sector 10.20 by the dominance criterion. But in particular the last years food processing enterprises merged, meaning

that fish processing is maybe only a minor part of the companies activity. This could lead to the wrong conclusion that fish processing industry has decreased. Under DCF turnover and employment data for enterprises with non main activity have been collect on a bi- respectively triannual basis. Additional variables are also collected under the DCF compared to EUROSTAT, like e.g. employment by gender. It could be nevertheless an option to collect the data only every two-three years as changes from year to year are small.

STECF has suggested several times a study on the costs and feasibility of data collection of volume of raw material to be able to assess the link between the fishing fleet and the processing sector. Such a study is still not done. EWG 13-05 again strongly suggests doing such a study as soon as possible. To get decent information some MS should get the possibility to do a national pilot study and the EWG13-05 recommends that such a study should be financially eligible under the EMFF.

Total production of the processing industry in Europe is not published as some production figures are not reported due to confidentiality reasons. In Germany the production of those confidential sectors is summed up in the total but not reported in the specific segmentation at e.g. produced statistics. So the suggestion would be to follow this approach on a European level as well, meaning that the total production of the whole sector is published but not in detail for the confidential segments.

EWG 13-05 agreed to propose the following changes to the list of economic variables for the processing industry sector (Appendix XIV of Annex 1):

- The variable "*Extraordinary costs, net*" in the variable group "*Extraordinary costs, net*" to be replaced by "*Extraordinary costs*". The variable group "*Extraordinary costs, net*" to be named as "*Extraordinary costs*". The variable "*Extraordinary income*" to be added to the "*Income*" variable group.
- Replace the variable "*Financial costs, net*" from the variable group "*Capital costs, net*" by the variable "*Financial income*" to be placed in the variable group "*Income*" and "*Financial costs*" to be placed in the variable group "*Capital costs*".
- The variable "*Imputed value of* unpaid *labour*" to be named "*Value of unpaid labour*", because the term imputed is not needed.
- The variable "*Wages and salaries*" to be named as "*Personnel costs*", as it is used in the Structural Business Statistics (SBS). Then the variable group name "*Personnel costs*" needs to be renamed as "*Labour costs*" because in it there is also "*Value of unpaid labour*".
- The variable group and variable "*Other operational costs*" to be named as "*Other operating costs*", as it is used in SBS.
- The variable "*Total number of hours worked per year*" should be collected, added to the variable group "employment" in order to have a comparable unit to measure (among others) productivity across MS and overall.

#### The variable

• Payment for external agency workers

The EWG13-05 proposed to amend the variable group labour costs, as in particular the processing industry this cost item is currently included in other operational costs, but economically are costs related to the production factor labour. Thus, calculating labor productivity figures leads currently to wrong results. The number of external workers, necessary for calculation of labor productivity, could be calculated by using average salaries in the sector. Furthermore, outsourcing of labor tends to socially more unsecure labor conditions. So collecting/reporting this variable has two rationales, a social and a economic one. For countries, that do not regularly collect this data separately, a pilot study to assess the importance of this issue seems obvious.

• Raw material

The EWG13-05 proposed to be collected optionally separately by species and origin (Domestic/EU/Abroad) and Source (Aquaculture or wild catch). This shall be a part of the assessment and the proposed study on this issue carrying out the feasibility of such data collection for raw material by species and origin. The total value of raw material will be part of other operational costs, following SBS.

• Number of Enterprises

The EWG13-05 proposed to have a new limit of 20 persons employed in order to report the number of enterprises. This is according SBS, as most Member states apply a limit of 20 persons employed for more detailed data collection in SBS. So the new categorization gives a clearer picture about number of enterprises where data are collected more intensively and where this is not the case in SBS. This change shall in no way be misinterpreted as a threshold for the need of data collection.

Pending:

It remains an open question whether "Total value of assets" included cash and bank accounts, which would mean it is the total sum of the balance sheet. Then it could be used to calculate equity by simply deduct debt. Maybe then it should be renamed into sum of balance sheet.

### 7.5 Fleet

In the general part of the consultation document EWG 13-05 proposes the following changes:

For the definition of the population all vessels in the EU Fishing Fleet Register on December 31<sup>st</sup> and any active vessel fishing at least one day during the year shall be used. This means that all active vessels (also when only fishing a few days) and inactive vessel are part of the population that year and to be sure all landings during the year are covered.

Due to confidentiality reasons and that the fleet is divided in segments which are sometimes very small MS may cluster similar segments to be able to report the economic data (in case companies not allow to report it). EWG 13-05 proposes to use a threshold of 10 vessels as a minimum when clustering to keep the time series intact and to make sure that MS not clustering a larger number of vessels.

EWG 13-05 agreed to propose the following changes to the list of economic variables for the fleet (Appendix XI of Annex 1):

- Rename "*Direct subsidies*" to "*Subsidies*" and then a definition will be given in the "glossary" what falls into this category.
- The variable "*Wages and salaries*" to be named as "*Personnel costs*", as it is used in the Structural Business Statistics (SBS). Then the variable group name "*Personnel costs*" needs to be renamed as "*Labour costs*" because in it there is also "*Value of unpaid labour*".
- The variable "Personnel costs" shall include social security costs.
- The variable group and variable "*Other operational costs*" to be named as "*Other operating costs*", as it is used in SBS.
- Include a variable "Unpaid labour" to be able to include the owners/skippers in the total employment.
- The variable "*Total number of hours worked per year*" should be collected, added to the variable group "employment" in order to have a comparable unit to measure (among others) productivity across MS and overall. "*FTE harmonized*" shall be deleted.
- The variable "*Repair and maintenance*" should remain disaggregated and not to be included in "*Other operating costs*".
- *"Annual depreciation"* to be renamed *"Consumption of fixed capital"* and MS shall define in their future National programmes on what basis they provide this variable, using information from company accounts or calculating it by using the PIM method. PGECON should have a

further look on the effects of providing information by using the PIM method as the results are sensitive to the used assumptions (e.g. on replacement value of vessels).

- In the variable group "Capital value" only two variables remain "Value of fixed capital" and "Value of quota and fishing rights". The definition how to calculate the value of fixed capital will be included in the 'glossary' (replacement or historical value).
- *Change "Investment in fixed capital" to "Investment in tangible assets*" and add "*Investment subsidies*" as an optional variable. With investment in tangible assets we use the common terminology and investments subsidies are a major category when analyzing payments to the companies from the EFF/EMFF.
- Change "*Debt/asset ratio*" to "*Debt*" and add "*Total assets*". Gives a clearer picture as the ratio alone is not very useful.
- For economic analysis the total amount of GT or KW of a fleet segment is more important than the average. Therefore, the transversal variables shall be changed to Total numbers.
- Number of enterprises shall be collected on the level of the total fleet not fleet segment (one of the few exemptions from the general rule to collect data on fleet segment level).
- Delete variable group "*Production value per species*" as this information is available from other sources and this would avoid double work.

A workshop on the possible definition of a threshold when collecting data for less active vessels has been proposed by PGECON within the list of eligible meeting for 2013. The workshop shall investigate if thresholds could be applied to reduce effort of data collection for "less active" vessels for which estimation models could be used. The workshop should also advise on what information might be missing if a threshold is introduced and how data should be reported. Proposed terms of reference for this workshop are included in the 2013 PGECON report.

### 8 **DEFINITION OF KEY TERMS**

STECF EWG 13-05 reviewed the proposed list of definitions of key terms as compiled under an adhoc contract in April 2013. The list was made available to the EWG as a 'fiche' (Fiche on the Data Collection Multiannual Programme 2014-202, Definition of key terms, "June 2013, 2013-05-17 Fiche definitions key terms.doc").

EWG 13-05 proposed a few new terms for inclusion to this list, reviewed the proposed terms and proposed amended definitions on some items. Where appropriate, already established definitions should be taken into account as conflicting or overlapping definitions should be avoided. However, for data collection purposes, definitions might need stricter descriptions compared to other documents.

Appendix XV of Annex 1 provides the proposed list of key terms, including the comments, amendments and additions by EWG13-05.

#### 9 EWG-13-05 LIST OF PARTICIPANTS

Information on STECF members and invited experts' affiliations is displayed for information only. In some instances the details given below for STECF members may differ from that provided in Commission COMMISSION DECISION of 27 October 2010 on the appointment of members of the STECF (2010/C 292/04) as some members' employment details may have changed or have been subject to organisational changes in their main place of employment. In any case, as outlined in Article 13 of the Commission Decision (2005/629/EU and 2010/74/EU) on STECF, Members of the STECF, invited experts, and JRC experts shall act independently of Member States or stakeholders. In the context of the STECF work, the committee members and other experts do not represent the institutions/bodies they are affiliated to in their daily jobs. STECF members and invited experts make declarations of commitment (yearly for STECF members) to act independently in the public interest of the European Union. STECF members and experts also declare at each meeting of the STECF and of its Expert Working Groups any specific interest which might be considered prejudicial to their independence in relation to specific items on the agenda. These declarations are displayed on the public meeting's website if experts explicitly authorized the JRC to do so in accordance with EU legislation on the protection of personnel data. For more information: http://stecf.jrc.ec.europa.eu/adm-declarations

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## 10 LIST OF BACKGROUND DOCUMENTS

Background documents are published on the meeting's web site on: http://stecf.jrc.ec.europa.eu/web/stecf/ewg1305 11 ANNEX 1. COMMENTS ON BUILDING BLOCK B AND D OF "EU DATA COLLECTION FOR FISHERIES 2014-2020, CONSULTATION DOCUMENT, 4 JUNE 2013

## Annex 1 to the report of the STECF Expert Working Group on Review of DC-MAP – PART 2 (EWG-13-05)

Comments on Building Block B and D of "EU Data Collection for Fisheries 2014-2020, Consultation document, 4 June 2013"

## CHAPTER I – TRANSVERSAL DATA

## 1) Access to information sources

- a) Member States shall ensure that, in order to carry out the DC-MAP data collection, involved institutes, agencies or organisations designated by the body in charge of the implementation of the national programme have timely access to all primary data fleet register information, special fishing permits information, fishing authorisation information, logbook information, sales notes information and VMS information or information collected for vessels not carrying logbooks.
- b) Member States shall ensure that samplers designated by the body in charge of the implementation of the national programme have access to: all landings, including as appropriate, transhipments and transfers to aquaculture; vessel and business registers operated by public bodies relevant for the collection of economic data; economic data of fisheries related businesses.

## 2) Capacity

- a) Member States shall ensure that selected variables given in appendix III collected according to Council Regulation 26/2004 are made available.
- b) Member States shall if needed carry out additional collection of information on fishing gear used if the fleet register information on gears are not sufficient to implement adequate sampling schemes.

## 3) Fishing licenses and fishing authorisation information

a) Member States shall ensure that fishing licenses and fishing authorisation information recorded according to Commission Regulation 404/2011 article 4, 5 and 6, annex II and annex III are made available.

## 4) Catch data

- a) Member States shall ensure availability of:
  - i) data on landings of fish and shell fish in terms of volume in weight and value recorded according to Council Regulation 1224/2009,
  - ii) data on discards recorded according to provision on logbooks given in Council Regulation 1224/2009 and annex X of the Commission Regulation 404/2011.
  - iii) data on landings and discards for vessels not carrying a logbook collected according to Council Regulation 1224/2009 article 16 and the provisions given in Commission Regulation 404/2011 annex XVI.
- b) If the quality of the landing/catch statistics recorded according to Council Regulation 1224/2009 does not meet the requirements for the use of the DC-MAP, Member States shall implement additional collection of the data concerned. Justification for additional DC-MAP data collection should be provided.

## 5) EFFORT data

- a) Member States shall ensure that effort data recorded according to the provisions in Council Regulation 1224/2009 are made available. The minimum variables to be made available are those mandatory logbook variables given in Commission Regulation 404/2011 annex X.
- b) If it on a regional level is agreed that the optional variables, given in Commission Regulation 404/2011 annex X is needed, Member States shall carry out additional sampling.
- c) Member States shall ensure that data for vessels not carrying a logbook, collected according to Council Regulation 1224/2009 article 16 and the provisions given in Commission Regulation 404/2011 annex XVI, are made available.
- d) If the quality of the recorded fishery effort information according to Council Regulation 1224/2009 does not meet the requirements for the use of the DC-MAP, Member States shall implement additional collection of the data concerned. Justification for additional DC-MAP data collection should be provided.

## 6) VMS data

- a) Member States shall ensure that Vessel Monitoring System Data (VMS) variables, collected according to the Council Regulation 1224/2009 article 9, are made available.
- b) If other electronic vessel monitoring data are collected, Member States shall ensure availability of these data.

## 7) Quality Indicators

a) Member States shall include in their annual report information on the quality of estimates.

## CHAPTER II – DATA REQUIRED FOR ASSESSING THE STATE OF EXPLOITED MARINE BIOLOGICAL RESOURCES AND THE IMPACT OF FISHING ACTIVITIES ON THE MARINE BIOLOGICAL RESOURCES.

## A. Biological Variables

## 1) End Users need

- a) Biological data collection must be aligned to the specific assessment or management requirements of end-users.
- b) In line with article 37 of Council general approach of CFP COM(2011)425 final of the 11th of June 2013, the final list of end users shall be established by the Commission. The list of end users whose data needs are considered here is<sup>1</sup>:
- ICES
- European Commission
- NAFO
- GFCM
- CECAF
- ICCAT
- IOTC
- CCAMLR
- c) Commercial Fisheries.
  - i) The various categories of end-user needs<sup>2</sup> as defined by regional management or advisory organisations for commercial fisheries are shown in Appendix IV along with their statements of the generic core data requirements that are necessary to attain the assessment or management outcome as defined by each category.
- d) Recreational Fisheries
  - i) Data collection on recreational fishery shall be mandatory if a certain share of total catches is taken by recreational fisheries. To assess this, Member States shall collect data on volume and species composition in a certain timely distance, e.g. every 3 years. The frequency is still an open question and this and the methods and coordination may be done by the RCGs.
  - ii) Species caught in recreational fisheries as identified by end users for data collection purposes are outlined in Appendix V.

## 2) Variables to be collected

a) Commercial Fisheries

<sup>&</sup>lt;sup>1</sup> EWG 13-05 is not proposing this as the final list, but the structure of this section requires end user needs to be accounted for, so we have included an illustrative list here

 $<sup>^{2}</sup>$  ICES' consultation response on end user data needs was the only one available to the group that was sufficiently specific to permit the sort of use that we have made of it. Other regional management or advisory groups will need to specify something along the same lines specific to their own needs. The ICES example can be considered illustrative of the approach we have taken.

- i) Core variables
  - (1) Member States must ensure their biological sampling schemes respect statistically sound sampling procedures and that they are regionally coordinated to cover the spatial and temporal distribution of the species and fisheries. Data collection shall be coordinated by the Regional Coordination Groups.
  - (2) Species lists that are identified by stock or management unit as provided by regional management or advisory organisations are given in Appendix VI<sup>3</sup>. These are indexed against the relevant end-user's categories, and indicate the core data that are necessary to be collected for each species to attain the appropriate assessment or management outcome.
- ii) Optional variables<sup>4</sup>.
- iii) For shore-based sampling, the Member State on whose territory the first sale take place, shall be responsible for ensuring that biological sampling occurs according to the standards defined in this EU Programme.
- iv) Member States shall co-operate with the authorities of non-EU countries to set up biological sampling programmes for the landings carried out by vessels flying the third country's flag and to ensure that any catch from Member State vessels that are offered for first sale in a third country are sampled by that country.
- v) For at-sea sampling the Member State shall be responsible for sampling vessels flagged by that flag Member State.
- b) Recreational Fisheries
  - i) Core variables
    - (1) Specific details of survey schemes such as periodicity of estimates (e.g. annual, twice a year or quarterly) and type of data to collect (e.g. numbers, weight, length compositions) shall be agreed at a regional level.
  - ii) For recreational fisheries Member States shall be responsible for sampling recreational fishing carried out within the state, including territorial waters
- c) Design-based sampling
  - i) Commercial and Recreational Fisheries
    - (1) Member States are responsible to ensure best practice in design and implementation of statistically sound catch sampling schemes. Best practice can be defined as sampling designs, implementation and data analysis that lead to minimum bias and an accurate estimate of precision, and which make the most efficient use of sampling resources. Guidelines for best practice are not yet fully developed, but indicative guidance documents are listed in Appendix VII.

<sup>&</sup>lt;sup>3</sup> Use is made of the ICES example as an illustration of the approach we have take. There was insufficient information available to populate other regional examples.

<sup>&</sup>lt;sup>4</sup> There was nothing said at the meeting about these other than there is a need to include reference to them in order to make the possibility of collecting them eligible for EMFF contributions.

- (2) A summary of the sampling protocols carried out by Member States shall be made available through the Annual Workplan. All national surveys should document the sample frame, sample selection procedures, response rates, imputation methods for missing data and weighting procedures employed to derive national estimates. Deviation from the best practice guidelines (Appendix VII) should be described to allow the identification of possible bias in the final estimates.
- (3) It is recognised that there will be a need for a transition time for Member States to fully adopt regionally consistent design based schemes. This transition shall be made no later than 20XX (the mid-point of the current EMFF funding cycle).
- (4) Sampling design should be regionally coordinated by the relevant Regional Coordination Group
- (5)

#### d) Minimum sampling effort

- i) Commercial fisheries
  - (1) A minimum sampling target shall be set, remaining at least at the present level of activity. Threshold levels shall be defined for sampling programmes rather than targets. These threshold levels shall be consistent with best practice in terms of statistical robustness. A provision for a minimum sampling effort shall be set, rather than precision targets. Regional coordination shall ensure that national sampling programmes are organized such that they satisfy the end user requirements within the operational constraints of the sampling programmes.
- ii) Recreational fisheries
  - (1) Countries with a very low share of the recreational catches of target stocks in a region shall have correspondingly lower survey effort and precision requirements for the delivery of data. Regional coordination shall ensure that national sampling programmes are organized such that they satisfy the end user requirements within the operational constraints of the sampling programmes.

#### e) Exemptions

- i) Member States landing in their flag state
  - (1) The annual workplan of a Member State may exclude the estimation of biological variables for stocks for which TACs and quota have been defined under the following conditions:
    - (a) the relevant quota must correspond to less than 10 % of the Community share of the TAC or to less than 200 tonnes on average during the previous three years;
    - (b) the sum of relevant quotas of Member States whose allocation is less than 10 %, must account for less than 25 % of the Community share of the TAC.
  - (2) If the condition set out in above point 1(a) is fulfilled, but not the condition set out in point 1(b), the relevant Member States shall establish a joint sampling scheme.
  - (3) Appropriate adjustment may be made to annual workplans to take account of quota exchanges between Member States:
  - (4) For stocks for which TACs and quotas have not been defined and that are outside the Mediterranean Sea and Black Sea the same rules established under point (1), above, apply on the basis of the average landings of the previous three years and with reference to the total Community landings from a stock;
  - (5) For stocks in the Mediterranean Sea and Black Sea, the landings by weight of a Mediterranean or Black Sea Member State for a species corresponding to less than 10 % of the total Community

landings from the Mediterranean Sea or Black Sea, or to less than 200 tonnes, except for Bluefin tuna.

ii) Member States landing outside their flag state<sup>5</sup>

<sup>6</sup>*RCM* Baltic and *RCM NA* both proposed a procedure to identify were bilateral agreements on sampling of foreign landings have to be set up. *RCM NA* reflecting on the issue after *RCM* Baltic had a different view, but it appeared that the rule proposed by *RCM* Baltic was set for the biological parameters whereas the rules set by *RCM NA* would apply to métier related variables. Eventually, LM agreed to propose the following:

### For métier related variables (RCM NA proposal) a bilateral agreement must be set up:

• where less than 5% of a member state's total landings are landed abroad, sampling is excluded from the obligation of sampling abroad (corresponding to the application of 1639/2001) if the other 95% of the landings are sufficiently sampled by the landing countries for the relevant métier(s);

• the reference period to be used in the analysis should be the latest available reference year;

For biological variables (RCM Baltic proposal) it was agreed:

- that 200 tonnes limit exemption rule (2010/93/EU B2.1.5) is applied also for foreign landings;
- that species where less than 5% of a member state's total landings are landed abroad are excluded (corresponding to the application of 1639/2001);
- that if No. of samples according the old DCR (1639/2001appendix XV) are 3 or less, there is no need for sampling of the landings by the landing country and can instead be sampled by the flag country. Also, in these cases no formal agreement needs to be set up;

• that the analysis on when bilateral agreements are needed should be done annually by the RCM using landing data from the previous year. "

Following the above procedure performed on RCM NS&EA, also endorsed by both LM and STECF, the RCM Baltic carried out an evaluation of foreign landings based on the data available in FishFrame.

- (1) The annual workplan of a Member State may exclude the sampling of biological variables for stocks for which TACs and quota have been defined under the following conditions:
  - (a) the relevant quota corresponds to less than 200 tonnes on average during the previous three years;;
  - (b) less than 5% of a Member State's total landings of the stock concerned are landed abroad;
  - (c) the number of samples according the old DCR (1639/2001appendix XV) are 3 or less. In this situation there is no need for sampling of the landings by the landing country and can instead be sampled by the flag country. Also, in these cases no formal agreement needs to be set up;

#### f) Consideration of metiers

<sup>&</sup>lt;sup>5</sup> EWG 13-05 has not addressed who should be responsible for collecting data from landings outside the flag state.

<sup>&</sup>lt;sup>6</sup> This section is based on text provided by the Liaison meeting. It refers to sampling metier related variables and biological variables. However, EWG 13-05 now have only biological variables and sampling is not necessarily carried out at the metier level, so the following wording needs to be modified to take account of those changes. The original LM text is in italics and EWG 13-05 suggested wording, is provided in standard font below the italicised section.

i) Member States shall continue to define metiers in accord with requirements of the relevant Regional Coordination Meetings. Transversal data including landed weights by species, should include information required to allow allocation to metiers based on the defined target assemblage and fishing gear characteristics as defined in Appendix ?<sup>7</sup> to ensure the continuation of time series data for fisheries based management models. Metiers shall be ranked at the regional level to decribe the relevant importance of metiers based on the landed weight of species, value and effort to allow Member States to check that their sample frames encompass their important metiers.

## B. Research surveys at sea

- a) Member States shall carry out research surveys at sea, independently of fishery based data, to collect the data required by end-users to assess the state of the stock and the impact of the fishing activity on the state of the stock and on the marine ecosystem.
- b) Member State shall confirm their commitment to carry out their contribution to the surveys at sea, listed in the Appendix VIII in their Operational Programme.
- c) Member States shall guarantee within their Operational Programme, continuity with previous survey designs.
- d) Notwithstanding points b) and c), changes can be made in the list and modification in the survey effort or sampling design may be proposed, provided that this does not negatively affect the quality of the results. Proposals for amendments will emerge through the process of evaluation and end user consultation and be approved by the Commission
- e) Member States shall ensure that the primary data collected under the research surveys at sea are transmitted to international scientific organisations and appropriate scientific bodies within regional fisheries management organisations in accordance with the international obligations of the Community and the Member States.

<sup>&</sup>lt;sup>7</sup> Not provided here. It will be an update of Appendix IV from 93/2010

## CHAPTER III – DATA REQUIRED FOR ASSESSING THE IMPACT OF FISHING ACTIVITIES ON THE MARINE ECOSYSTEM.

## A. BY-CATCH

## 1) Option I

- a) Member States shall monitor incidental catches of marine mammals, birds and marine turtles in their existing observer monitoring programmes
- b) The following variables shall be monitored
  - i) Number of individuals by-caught, by species including zero observations and also indications on animals lost during hauling the gear or released alive
  - ii) Date and geographic location (following the geographic stratification as listed in Appendix I, EC 93/2010)
  - iii) The type of fishery/gear characteristics
  - iv) Any mitigation device used

## 2) Option II

- a) Member States shall monitor incidental catches of marine mammals, birds and marine turtles
- b) The following variables shall be monitored
  - i) Number of individuals caught, by species including zero observations and also indications on animals lost during hauling the gear or released alive
  - ii) Date and geographic location (following the geographic stratification as listed in Appendix I, EC 93/2010)
  - iii) The type of fishery/gear characteristics
  - iv) Any mitigation device used
- c) The monitoring may be based on sampling plan.

## **B. ENVIRONMENTAL INDICATORS**

## CHAPTER IV – DATA REQUIRED FOR ASSESSING THE SOCIAL AND ECONOMICAL PERFORMANCE OF FISHING, AQUACULTURE AND PROCESSING SECTOR.

## A. Economic and social data required for assessing the performance of the fishing sector

### 1) Variables

a) Variables to be collected are listed in Appendix XI. All economic variables are to be collected on an annual basis and by fleet segment (Appendix III of EC 93/2010). The population is all vessels in the EU Fishing Fleet Register on December 31st and any active vessel fishing at least one day during the year<sup>8</sup>. All economic variables have to be collected for active vessels. For each vessel for which economic

<sup>&</sup>lt;sup>8</sup> The fixed day include also the inactive vessels in that year. With this method all active and inactive vessels during the year will be included.

variables defined in Appendix XI are collected, the corresponding transversal variables defined in Appendix III have also to be collected.

- b) For inactive vessels fleet variables (Appendix XI) shall be collected.
- c) National currencies shall be transformed into Euro using the average annual exchange rates available from the European Central Bank (ECB).

## 2) Disaggregation levels

- a) Economic variables shall be reported for each fleet segment (Appendix III of EC 93/2010) and supra region (Appendix II).
- b) The dominance criteria shall be used to allocate each vessel to a segment based on the number of fishing days used with each gear. If a fishing gear is used by more than the sum of all the others, the vessel shall be allocated to that segment. If not, the vessel shall be allocated to the following fleet segment:
  - i) "Vessels using Polyvalent active gears" if it only uses active gears;
  - ii) "Vessels using Polyvalent passive gears" if it only uses passive gears;
  - iii) "Vessels using active and passive gears".
- c) In cases where a vessel operates in more than one supra region as defined in Appendix II, Member States shall explain the criteria of allocation in their national programme to which supra region the vessel is allocated.
- d) In case confidentiality criteria apply for less than 10 vessels or 3 enterprises<sup>9</sup> MS might use clustering in order to design the sampling plan and to report economic variables. If clustering is made:
  - i) Member States shall report which fleet segments have been grouped at the national level and shall justify the clustering on the basis of statistical analysis;
  - ii) In their annual report, Member States shall report the number of sampled vessels for each fleet segment regardless of any clustering made to collect or provide the data;
  - iii) MS should follow guidelines recommended by STECF when clustering.

### 3) SAMPLING STRATEGY

- a) Member States shall describe their methodologies used for estimating each economic variable, including quality aspects, in their national programmes.
- b) Member States shall ensure consistency and comparability of all economic variables when derived from different sources (e.g. surveys, fleet register, logbooks, sales notes).

### 4) QUALITY INDICATORS

a) Member States shall include in their annual report information on the quality of estimates.

## **B.** Economic and social data required for assessing the performance of the aquaculture sector

### 1) VARIABLES

- a) All variables listed in Appendix XII are to be collected on an annual basis per segment according to the segmentation set out in Appendix XII. Except for CHECK appendix
- b) The statistical unit shall be the enterprise<sup>10</sup> or the farm defined as the lowest legal entity for accounting purposes.

<sup>&</sup>lt;sup>9</sup> 10 vessels would keep the time series stable as we used it before. 3 enterprises is always the threshold for confidentiality issues (see EUROSTAT Manual on disclosure control methods).

<sup>&</sup>lt;sup>10</sup> EUROSTAT collects on farm level (not economic data). It is up to end users to say on which level (for example to have a more detailed regional approach) they want the data.

- c) The population shall refer to enterprises whose primary activity is defined according to the EUROSTAT definition under NACE Code [03.02]: "Fish Farming".
- d) National currencies shall be transformed into Euro using the average annual exchange rate available from the European Central Bank (ECB).

### 2) DISAGGREGATION LEVEL

a) Data shall be segmented by species and technique for aquaculture, as mentioned in Appendix XII.

## 3) SAMPLING STRATEGY

- a) Member States shall describe their methodologies for estimating each economic variable for aquaculture, including quality aspects, in their national programmes.
- b) Member States shall ensure consistency and comparability of all economic variables when derived from different sources (e.g. questionnaires, financial accounts). [MS should follow Best Practice from the MRR.

## 4) QUALITY INDICATORS

a) Member States shall include in their annual report information on the precision) of estimates.

## C. Economic and social data required for assessing the performance of the processing sector

## 1) VARIABLES

- a) All variables listed in Appendix XIII are to be collected [for the population [in year 2 and 5 of the timeframe of the DCMAP]][Wherever possible MS shall use EUROSTAT data to avoid double sampling.]
- b) The population shall refer to enterprises whose main activity is defined according to the EUROSTAT definition under NACE Code [10.20]: "Processing and preserving of fish and fish products".
- c) As a guideline, the national codes applied by Member States under Council Regulations (EC) No 852/2004 of 29 April 2004 on the hygiene of foodstuffs, (EC) No 853/2004 of 29 April 2004 on hygiene rules for food of animal origin and (EC) No 854/2004of 29 April 2004 on the organisation of official controls on products of animal origin intended for human consumption, shall additionally be used as a means of cross checking and identifying enterprises classified under NACE code 10.20.
- d) National currencies shall be transformed into Euro using the average annual exchange rate available from the European Central Bank (ECB).

### 2) DISAGGREGATION LEVEL

- a) The statistical unit for collection of data shall be the "enterprise" as defined as the lowest legal entity for accounting purposes.
- b) For enterprises that carry out fish processing but not as a main activity, it is mandatory to collect the following data, in the first year of each programming period:
  - i) Number of enterprises;
  - ii) The turnover attributed to fish processing.

### 3) SAMPLING STRATEGY

a) Member States shall describe their methodologies for estimating each economic variable for the processing industry, including quality aspects, in their national programmes.

b) Member States shall ensure consistency and comparability of all economic variables when derived from different sources.

#### 4) QUALITY INDICATORS

a) Member States shall include in their annual report information on the precision) of estimates.

#### **BUILDING BLOCK D: MASTER REFERENCE REGISTER**

Geographic Stratification by Regional Fisheries Management Organisations							
	I.C.E.S.	N.A.F.O	I.C.C.A.T	G.F.C.M.	C.C.A.M.L.R.	ΙΟΤϹ	Other
Level 1	Area	Area	FAO Area	Area	Area	FAO Area	FAO Area
				e.g. 37	e.g. 48		
				Mediterranean and			
				Black sea			
Level 2	Sub-area	Sub-area	FAO Sub-area	Sub-area	Sub-area	FAO Sub-area	FAO Sub-area
	e.g. 27.IV	e.g. 21.2		e.g.37.1	e.g. 48.1		
	North Sea	Labrador		Western	Antarctic		
					Peninsula		
Level 3	Division	Division	Division	Division	Division	Division	Division
	e.g. 27.IV c	e.g. 21.2 H	5° x 5°	e.g. 37.1.2 Gulf of	e.g. 58.5.1	5° x 5°	5° x 5°
				Lions	Kerguelen islands		
Level 4	Subdivision			GSA			
	e.g. 27.III.c.22			e.g. GSA 1			
Level 5	Rectangle	Rectangle	Rectangle		Rectangle	Rectangle	Rectangle
	30' x 1°		1° x 1°		30' x 1°	1° x 1°	1° x 1°

## Appendix I Geographic Stratification by Regional Fisheries Management Organisations
	Geographical stratification by Region						
	Sub region / Fishing ground <sup>1</sup>	Region	Supra region				
Level	1	2	3				
	Cluster of spatial units on level	Baltic Sea (ICES areas III	Baltic Sea (ICES areas III b-d), North				
	4 as defined in Appendix I	b-d)	Sea (ICES areas IIIa, IV and VIId) and				
	(ICES subdivision)		Eastern Arctic (ICES areas I and II),				
	Cluster of spatial units on level	North Sea (ICES areas IIIa,	and North Atlantic (ICES areas V-XIV				
	3 as defined in Appendix I	IV and VIId) and Eastern	and NAFO areas).				
	(ICES Division)	Arctic (ICES areas I and II)					
	Cluster of spatial units on level	North Atlantic (ICES areas					
	3 as defined in Appendix I	V-XIV and NAFO areas)					
	(ICES/NAFO Division)						
	Cluster of spatial units on level	Mediterranean Sea and	Mediterranean Sea and Black Sea				
	4 as defined in Appendix I	Black Sea					
	(GSA)						
	RFMO's sampling Sub-areas	Other regions where	Other regions				
	(except GFCM)	fisheries are operated by EU					
		vessels and managed by					
		RFMO's to which the EU is					
		contracting party or					
		observer (e.g. ICCAT,					
		IOTC, CECAF)					

Appendix II Geographical stratification by Region

1. Sub-regions or fishing grounds are established by Member States for the first programming period (2009-2010); they may be redefined by Regional Coordination Groups and agreed by STECF if necessary. This level should be consistent with existing geographical divisions.

*Appendix III* List of raw data on fisheries dependent information that shall be made available for DCF purpose.<sup>11</sup>

Type of data	Mandatory/Optional	Comment
CAPACITY DATA REG(EC)26/2004		
Country of Registration	М	
CFR	М	
Event code	М	
Date of event	Μ	
Licence indicator	М	
Port of Registration	Μ	
VMS Indicator	М	
Main fishing gear	М	
Subsidiary fishing gear	М	
LOA (Length over all)	М	
Tonnage GT	М	
Power of main engine In kW	М	
Power of auxiliary engine	М	
Hull material	М	
Year of construction	М	
Name of owner of vessel:	Μ	
Address of owner	М	
CATCH DATA - REG(EU)404/2011 (ANNEX		
X)		
CFR	М	
Information on the trip		
Day, month, hour (Local) and port of departure	М	
Day, month, hour (Local) and port of return	М	
Date and port of landing	М	
Information on the gear		
Fishing gear	М	
Mesh size	М	
Dimensions	0	
Information on fishing operation		
Date		
Relevant geographical Area	М	
Statistical rectangle	0	
Third country fishing zone	М	
Species	М	
Quantities caught and retained on board	М	
Estimates of discards	Μ	

<sup>&</sup>lt;sup>11</sup> Title may be reworded: the combination of vessel and owner statistics with catch information is raw data but will not be made available to end-users.

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CFR	М	
Information on the trip		
Day, month, hour (Local) and port of departure	М	
Day, month, hour (Local) and port of return	М	
Date and port of landing	М	
Information on the gear		
Fishing gear	М	
Mesh size	М	
Dimensions	0	
Information on fishing operation		
Date/number of days	Μ	
Number of Fishing Operations	Μ	
Fishing Time	О	
Relevant geographical Area	Μ	
		Mandatory for ICE
Statistical rectangle	0	area
Third country fishing zone	Μ	
Fishing Depth	О	Mandatory for Dee Sea Fishing
LANDING DECLARATION REG(EU) 404/2011		
(ANNEX X)		
CFR	Μ	
Port of landing	Μ	
date of landing	М	
Species identification	М	
Relevant geographical area	М	
Type of product presentation	0	
Volume of landing	0	
Presentation	М	
SALES NOTES - REG(EC) 1224/2009 - article 64	М	
UFK Dort of londing	IVI M	
data of landing	IVI M	
uale of failung	IVI M	
Polovent goographical area	IVI M	
Type of product presentation		
Individual size/weight	0	
Grade	$\Omega^{12}$	
Presentation	M	
Freshness	M	
Destination of products		
Price	M	
	1V1	

VMS DATA - REG(EU) 404/2011 (ANNEX		
	Ν	
CFR (L. D. L. (C. L. (	M	
Day, month, hour (Local) and port of departure	M	
Day, month, hour (Local) and port of return	M	
Date (Year, month and date of transmission)	M	
Time of transmission	M	
Latitude (decimal)	M	
Longitude (decimal)	M	
Speed	М	
Course	Μ	
FISHING AUTHORIZATION - REG(EU)		
404/2011 (ANNEA III) CED	М	
Deriod of validity	IVI M	
Zono	M	
Zolic	M	
Species Fishing Coor	M	
Fishing Gear	M	
Other Condition	0	
DATA FROM CONTROL SAMPLING PLANs -		
REG(EU) 404/2011 (ANNEX XVI)		
CFR	Μ	
Information on the trip		
Day, month, hour (Local) and port of departure	М	
Day, month, hour (Local) and port of return	М	
Date and port of landing	М	
Information on the gear		
Fishing gear	М	
Mesh size	М	
Dimensions	Ο	
Information on fishing operation		
Date	М	
Number of Fishing Operations	М	
Fishing Time	Ο	
Relevant geographical Area	Μ	
Statistical rectangle	Μ	
Landing data		
Species	М	
Volume of landing	М	

### Appendix IV.

#### End user core data needs

# ICES (North Sea & Eastern Arctic and North Atlantic & Baltic)<sup>13</sup>

#### **Commercial Fisheries**

ICES has identified six categories of data needs based on the 'assessment type' relevant to different degrees of data availability. The categories range from data-rich to data-poor and they are described below and reflect the availability of data collected under early Commission Decisions governing the EU Data Collection Framework. Various other types of data and information may be relevant to assessing the state and productivity of a stock and the fishery exploiting it, e.g. life-history traits, gear selection parameters, distribution of fishing effort, genetic stock structure.

Assessment Type	Category
Analytic	1
Trends assessment	2
Trends survey	3.1
Trends cpue/lpue	3.2
Trends catches	4
Catch only	5
Catch only (data not species	6
specific)	

#### 1. Analytic – Category 1

Stocks with analytical assessments and forecasts.

These are the stocks that are not considered data-limited and this category includes stocks with full analytical assessments and forecasts as well as stocks with quantita-tive assessments based on production models.

#### 2. Trend Assessment – Category 2

Stocks with analytical assessments and forecasts that are only treated qualitatively. This category includes stocks with quantitative assessments and forecasts which for a variety of reasons are merely indicative of trends in fishing mortality, recruitment, and biomass.

#### 3. Trend Survey or CPUE/LPUE

Stocks for which survey-based assessments indicate trends.

#### 3.1 Trend Survey - Category 3.1

This category includes stocks for which survey indices that provide reliable indications of trends in stock metrics such as mortality, recruitment, and biomass

<sup>&</sup>lt;sup>13</sup> ICES' consultation response on end user data needs was the only one available to the group that was sufficiently specific to permit the sort of use that we have made of it. Other regional management or advisory groups will need to specify something along the same lines specific to their own needs. It may be possible to provide a single over-arching annex covering all regional end user needs in one set of descriptors and table, but that cannot be determined until all end users provide the relevant information. EWG 13-05 has assumed that each regional end-user will have their own set of descriptors and table of which the ICES case shown here is one example.

### **3.2 Trend CPUE/LPUE Category 3.2**

This category includes stocks for which indicators of stock size such as reliable fishery-dependant indices; e.g. lpue, cpue, and mean length in the catch are available that provide reliable indications of trends in stock metrics such as mortality, recruitment, and biomass.

#### 4. Trend Catches – Category 4

Stocks for which only reliable catch data are available This category includes stocks for which a time-series of catch can be used to approx-imate MSY

#### 5. Catch only - Category 5

This category includes stocks for which only landings data are available.

#### 6. Catch only (data not species specific) - Category 6

This category includes stocks where landings are negligible compared with discards. It also includes stocks that are part of stock complexes and are primarily caught as bycatch species in other targeted fisheries. The development of indicators may be most appropriate to such stocks.

# Tabulation of core data needs for ICES' categories.<sup>14</sup>

			Category						
			1	2	3.1	3.2	4	5	6
	Assessment Typ	ie	Analytic	Trends assessment	Trends survey	Trends cpue/lpue	Trends catches	Catch only	Catch only (data not species specific)
	Discards informa	tion	Included	Not included, but are or might be relevant	Partially included	Notincluded	Not included, considered to be low	Notavailable	?
	Length	current use future use	Yes	Yes	Yes	not used needed on short/medium term	Yes	not used	Other
	Age	current use future use	Yes	Yes	Yes	No	Yes	not used needed on short/medium term	not used
	Weight	current use future use	Yes	Yes	Yes	not used needed on short/medium term	Yes	not used	Other
Fisheries dependent	Sex ratio	current use future use	Yes	Yes	Yes	No	Yes	not used needed on short/medium term	not used
information	Maturity	current use future use	Yes	Yes	Yes	No	Yes	not used needed on short/medium term	not used
	Fecundity	current use	Yes	Yes	Yes	Yes	Yes	No	No
	Landings	current use	Yes	Yes	Yes	No	Yes	Zero TAC for the	?
	Discards	future use	Yes	Yes	Yes	not used	Yes	No	not used needed on short/medium term
	Effort	current use future use	Yes	Yes	Yes	No	Yes	not used needed on short/medium term	not used
	General	current survey use	Yes	Yes, but the existing surveys are not directed to this species	Time series of the current surveys is too short	No	No surveys are currently available, but are needed	?	?
Fishering	Length	current use future use	?	?	?	?	?	?	. ?
independent	Age	current use	?	?	?	Yes	?	?	?
information	Weight	current use	?	?	?	?	?	?	?
	Sex ratio	current use	?	?	?	Yes	?	?	?
	Maturity	current use	?	?	?	Yes	?	?	?
	Fecundity	current use	?	?	?	?	?	Yes	?

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<sup>&</sup>lt;sup>14</sup> This is essentially a transposed version of ICES original table provided in one of the worksheets of the master stock table that it provided in its consultation response. It needs to be reviewed by ICES given the use to which it is now being put.

### Appendix V

### Regional species lists defined by end users for recreational fishery catches.

Baltic (ICES Sub-divisions 22-32) Salmon, cod, eels and sharks ICES' addition: Sea trout

North Sea (ICES Divisions IIIa, IV & VIId) and Eastern Arctic (ICES Sub-areas I & II) Existing requirement: Cod, eels and sharks ICES' addition: European lobster and pollack

North Atlantic (ICES Sub-areas V-XIV)<sup>15</sup> Salmon, sea bass, eels and sharks. ICES' addition: Pollack

Mediterranean and Black Sea Bluefin tuna, eels and sharks

#### Appendix VI

#### Regional species lists defined by end users for commercial fishery catches.

#### ICES (North Sea & Eastern Arctic and North Atlantic)

ICES has defined a complete species list based on stocks for which assessment data are needed. It has also provided information on the current assessment type for each stock corresponding to the ICES table in Annex A. Inspection of the 'assessment type' column in the following table allows the data needs for each stock to be identified by cross-referencing it against the corresponding assessment type in Annex A.

Stock ID	Stock	Region???? OR??	Current Assesment Methodology	Current Category
agn-nea	Angel shark (Squatina squatina) in the Northeast Atlantic		Trends cpue/lpue	5.3.0
alf-comb	Alfonsinos (Beryx spp.) in the Northeast Atlantic		Catch only	6.2.0
anb-8c9a	Black-bellied anglerfish (Lophius budegassa) in Divisions VIIIc and IXa		Analytic	1
ane-bisc	Anchovy in Subarea VIII (Bay of Biscay)		Analytic	
ane-pore	Anchovy in Division IXa		Trends survey	520
anb-78ab	Black-bellied anglerfish (Lophius budegassa) in Divisions VIIb-k and VIIIa,b,d		Trends survey	3.2.0
anp-78ab	White anglerfish (Lophius piscatorius) in Divisions VIIb-k and VIIIa,b,d		Survey trends	3.2.0
ang-ivvi	Anglerfish (Lophius piscatorius and L. budegassa) in Divisions IIa, IIIa, Subarea IV and VI		Trends survey	3.2.0
anp-8c9a	White anglerfish (Lophius piscatorius) in Divisions VIIIc and IXa		Analytic	1
arg-icel	Greater silver smelt (Argentina Silus) in Division Va			3.3.0

These 2 colums need to be checked by ICES for consitency of link between methodology and category

<sup>&</sup>lt;sup>15</sup> The North Atlantic region also includes NAFO waters; however, the obligation for Member States to collect data on recreational fisheries does not extend to the NAFO area.

	Greater silver smelt (Argentina Silus) in Subareas I, II,	Trends survey	
	IV, VI, VII, VIII, IX, X, XII, and XIV, and Divisions IIIa and Vb (other areas)		220
arg-oth	Blue ling (Molva dypterygia) in Division Va and		3.2.0
bli-5a14	Subarea XIV (Iceland and Reykjanes ridge)		3.3.0
bli-5b67	Blue ling (Molva dypterygia) in Subdivision Vb, and Subareas VI and VII	Trends assessment	2
11. 4	Blue ling (Molva dypterygia) in Divisions IIIa, and IVa and Subareas I. II. VIII. IX. and XII		5.2.0
bli-oth bll-2232	Brill in Subdivisions 22 - 32 (Baltic Sea)		5.3.0
	Brill in Subarea IV and Divisions IIIa and VIId,e	I rends survey	3.2.0
bll-nsea boc-nea	Boarfish in the Northeast Atlantic	Survey trends based assessment	3
bsf-89	Black scabbardfish (Aphanopus carbo) in Subareas		5.5.0
bsf-nrtn	Black scabbardfish (Aphanopus carbo) in Subareas VI, VII and Divisions Vb and XIIb	Trends cpue/lpue	3.2.0
bsf-oth	Black scabbardfish (Aphanopus carbo) in other areas (Subareas I, II, IV, X, XIV and Divisions IIIa, Vb)	Catch only	3.2.0
bsk-nea	Basking shark (Cetorhinus maximus) in the Northeast Atlantic	No assesment	5.3.0
bss-8ab	European seabass in Divisions VIIIab (Bay of Biscay)	Catch only	5
bss-8c9a	European seabass in Divisions VIIIc and IXa (Atlantic Iberian waters)	Catch only	5
bss-wosi	European seabass in Divisions VIa, VIIb and VIIj (West of Scotland and Ireland)	Catch only	6
bss-47	European seabass in Divisions IVbc,VIIa and VIId-h (Irish Sea, English Channel and southern North Sea)	Analytic	3.1.0
cap-bars	Capelin in Subareas I and II, excluding Division IIa west of 5°W (Barents Sea capelin)	Analytic	1
cap-icel	Capelin in Subareas V, XIV and Division IIa west of 5°W (Iceland-East Greenland-Jan Mayen area)	Analytic	-
cod-2224	Cod in Subdivisions 22–24	Analytic	1
cod-2532	Cod in Subdivisions 25–32	Analytic	1
cod-347d	Cod in Subarea IV (North Sea), Divison VIId (Eastern Channel) and IIIa West (Skagerrak)	Analytic	1
cod-7e-k	Cod in Divisions VIIe-k (Celtic Sea cod)	Analytic	1
cod-arct	Cod in Subareas I and II (Northeast Arctic cod)	Analytic	1
cod-coas	Cod in Subareas I and II (Norwegian coastal cod)	Trends survey	-
cod-offgr	Offshore cod in ICES Subarea XIV and NAFO Subarea 1 (Greenland cod)	Trends survey	-
cod-ingr	Inshore cod in NAFO Subarea 1 (Greenland cod)	Trends survey	-
cod-farb	Cod in Subdivision Vb2 (Faroe Bank)	Trends survey	-
cod-farp	Cod in Subdivision Vb1 (Faroe Plateau)	Analytic	-
cod-iceg	Cod in Division Va (Icelandic cod)	Analytic	-
cod-iris	Cod in Division VIIa (Irish Sea)	Analytic	1
cod-kat	Cod in Division IIIa East (Kattegat)	Analytic	2.1.3
cod-rock	Cod in Division VIb (Rockall)	Catch only	6.2.0
cod-scow	Cod in Division VIa (West of Scotland)	Analytic	1
cyo-nea	Portuguese dogfish (Centroscymnus coelolepis) in the Northeast Atlantic	Trends cpue/lpue	6.3.0
and some	Red gurnard in the Northeast Atlantic	Catch only (data not species	5.2.0
dab-2232	Dab in Subdivisions 22 - 32 (Baltic Sea)	Trends survey	3.2.0
dahansea	Dab in Subarea IV and Division IIIa	Survey trends based assessment	3
dgs-nea	Spurdog (Squalus acanthias) in the Northeast Atlantic	Analytic	3.1.4

fle-2232	Flounder in Subdivisions 22 - 32 (Baltic Sea)	Trends survey	3.2.0
fle-nsea	Flounder in Division IIIa and Subarea IV	Survey trends based assessment	3
gag_nea	Tope (Galeorhinus galeus) in the Northeast Atlantic	Catch only	5.2.0
gfb-comb	Greater forkbeard (Phycis blennoides) in the Northeast Atlantic	Trends survey	3.2.0
sai-arct	Saithe in Subareas I and II (Northeast Arctic)		
ghl-arct	Greenland halibut in Subareas I and II	Trends survey	-
ghl-grn	Greenland halibut in Subareas V, VI, XII and XIV	Analytic	1
gug-347d	Grey gurnard in Subarea IV (North Sea) and Divisions VIId (Eastern Channel) and IIIa (Skagerrak - Kattegat)	Catch only (data not species specific)	5.2.0
gug-89a	Grey gurnard in Subarea VIII and Division IXa	Catch only (data not species specific)	6.2.0
gug-celt	Grey gurnard in Subarea VI and Divisions VIIa-c and e-k (Celtic Sea and West of Scotland)	Catch only (data not species specific)	6.2.0
gua-nea	Leafscale gulper shark (Centrophorus squamosus) in the Northeast Atlantic	Trends cpue/lpue	3.1.4
had-34	Haddock in Subarea IV (North Sea) and Division IIIa West (Skagerrak)	Analytic	1
had-7b-k	Haddock in Divisions VIIb-k	Analytic	1
had-arct	Haddock in Subareas I and II (Northeast Arctic)	Analytic	1
had-faro	Haddock in Division Vb	Analytic	-
had-iceg	Haddock in Division Va (Icelandic haddock)	Analytic	-
had-iris	Haddock in Division VIIa (Irish Sea)	Trends survey	3.2.0
had-rock	Haddock in Division VIb (Rockall)	Analytic	1
had-scow	Haddock in Division VIa (West of Scotland)	Analytic	1
her-2532-gor	Herring in Subdivisions 25 - 29 (excluding Gulf of Riga) and 32	Analytic	1
her-30	Herring in Subdivision 30 (Bothnian Sea)	Analytic	1
her-31	Herring in Subdivision 31 (Bothnian Bay)	Trends assessment	3.2.0
her-3a22	Herring in Division IIIa and Subdivisions 22 - 24 (Western Baltic spring spawners)	Analytic	1
her-47d3	Herring in Subarea IV and Divisions IIIa and VIId (North Sea autumn spawners)	Analytic	1
her-irls	Herring in Division VIIa South of 52° 30' N and VIIg,h,j,k (Celtic Sea and South of Ireland)	Analytic	1
her-irlw	Herring in Divisions VIa (South) and VIIb,c	Trends assessment	2.1.3
her-nirs	Herring in Division VIIa North of 52° 30' N (Irish Sea)	Analytic	1
her-noss	Herring in the Northeast Atlantic (Norwegian spring- spawning herring)	Analytic	1
her-riga	Herring in Subdivision 28.1 (Gulf of Riga)	Analytic	1
her-vasu	Herring in Division Va (Icelandic summer-spawners)	Analytic	-
her-vian	Herring in Division VIa (North)	Analytic	1
hke-nrtn	Hake in Division IIIa, Subareas IV, VI and VII and Divisions VIIIa,b,d (Northern stock)	Analytic	1
hke-soth	Hake in Division VIIIc and IXa (Southern stock)	Analytic	1
hom-nsea	Horse mackerel (Trachurus trachurus) in Divisions IIIa, IVb,c and VIId (North Sea stock)	Catch only	5.2.0
hom-soth	Horse mackerel (Trachurus trachurus) in Division IXa (Southern stock)	Analytic	1
hom-west	Horse mackerel (Trachurus trachurus) in Divisions IIa, IVa, Vb, VIa,, VIIa-c, e-k, VIIIa-e (Western stock)	Analytic	1
jaa-10	Blue jack mackerel (Trachurus picturatus) in Subdivision Xa2 (Azores)	Trends cpue/lpue	5.2.0
lem-nsea	Lemon sole in Subarea IV and Divisions IIIa and VIId	Survey trends based assessment	3

lin aret	Ling (Molva molva) in Subdivisions I and II	Trends cpue/lpue	3.2.0
lin-faro	Ling (Molva molva) in Division Vb		3.2.0
lin icol	Ling (Molva molva) in Division Va		3.3.0
1111-1001	Ling in (Molva molva) Divisions IIIa and IVa, and in	Trends cpue/lpue	3.2.0
lin-oth	Subareas VI, VII, VIII, IX, XII, and XIV (other areas)	Angletia	1
mac-nea	Southern, Western and North Sea spawning	Analytic	1
meg-4a6a	components) Megrim (Lepidorhombus spp) in Divisions IVa and	Analytic	1
1			220
meg-rock	(Rockall)	I rends survey	3.2.0
mgb-8c9a	Four-spot megrim (Lepidorhombus boscii) in Divisions VIIIc and IXa	Analytic	1
mgw-78	Megrim (Lepidorhombus whiffiagonis) in Divisions VIIb-k and VIIIa,b,d	Trends assessment	3.2.0
mgw-8c9a	Megrim (Lepidorhombus whiffiagonis) in Divisions VIIIc and IXa	Analytic	1
mur-347d	Striped red mullet in Subarea IV (North Sea) and Divisions VIId (Eastern English Channel) and IIIa (Skagerrak–Kattegat)	Trends survey	5.2.0
mur-west	Striped red mullet in Subarea VI, VIII and Divisions VIIa-c, e-k and IXa (Western area)	Catch only (data not species specific)	5.2.0
nep-10	Nephrops in Division IVa (Noup, FU 10)	Trends assessment	4.1.4
nep-11	Nephrops in Division VIa (North Minch, FU 11)	Analytic	1
nep-12	Nephrops in Division VIa (South Minch, FU 12)	Analytic	1
nep-13	Nephrops in the <b>Firth of Clyde</b> + Sound of Jura (FU	Analytic	1
nep-14	Nephrops in Division VIIa (Irish Sea East, FU 14)	Analytic	1
nep-15	Nephrops in Division VIIa (Irish Sea West, FU 15)	Analytic	1
nep-16	Nephrops in Division VIIb,c,j,k (Porcupine Bank, FU 16)	Analytic	1
nep-17	Nephrops in Division VIIb (Aran Grounds, FU 17)	Analytic	1
nep-19	Nephrops in Division VIIa,g,j (South East and West of IRL, FU 19)	Analytic	1
nep-2021	Nephrops in the FU 20 (Labadie, Baltimore and Galley), FU 21 (Jones and Cockburn)	Trends assessment	4.1.4.
nep-22	Nephrops in the Smalls (FU 22)	Analytic	1
nep-2324	Nephrops in Divisions VIIIa,b (Bay of Biscay, FU 23, 24)	Trends assessment	3.2.0
nep-25	Nephrops in North Galicia (FU 25)	Trends cpue/lpue	3.1.4
nep-2627	Nephrops in West Galicia and North Portugal (FU 26-	Trends cpue/lpue	3.1.4
nep-2829	Nephrops in South-West and South Portugal (FU 28- 29)	Trends cpue/lpue	3.2.0
nep-30	Nephrops in Gulf of Cadiz (FU 30)	Trends cpue/lpue	3.2.0
nep-31	Nephrops in the Cantabrian Sea (FU 31)	Trends cpue/lpue	3.1.4
nep-32	Nephrops in Division IVa (Norwegian Deeps, FU 32)	Trends assessment	4.1.4
nep-33	Nephrops in Division IVb (Off Horn Reef, FU 33)	Trends cpue/lpue	4.1.4
nep-34	Nephrops in Division IVb (FU 34)		4.1.4
nep-3-4	Nephrops in Division IIIa (Skagerak Kattegat, FU 3,4)	Trends assessment	1
nep-5	Nephrops in Division IVbc (Botney Gut - Silver Pit, FU 5)	Trends assessment	4.1.4
nep-6	Nephrops in Division IVb (Farn Deeps, FU 6)	Analytic	1
nep-7	Nephrops in Division IVa (Fladen Ground, FU 7)	Analytic	1
nep-8	Nephrops in Division IVa (Firth of Forth, FU 8)	Analytic	1
nep-9	Nephrops in Division IVa (Moray Firth, FU 9)	Analytic	1

nop-34	Norway Pout in Subarea IV (North Sea) and IIIa (Skagerrak - Kattegat)	Analytic	1
ory-comb	Orange Roughy (Hoplostethus atlanticus) in the Northeast Atlantic	Trends cpue/lpue	6.3.0.
pan-barn	Northern shrimp (Pandalus borealis) in Subareas I and II (Barents Sea)	Analytic	·
pan-flad	Northern shrimp (Pandalus borealis) in Division IVa (Fladen Ground)	Catch only	6.2.1
pan-sknd	Northern shrimp (Pandalus borealis) in Divisions IIIa West and IVa East (Skagerrak and Norwegian Deeps)	Trends survey	3.2.0
part of cod- 347d			
ple-2123	Plaice in Subdivisions 21, 22, and 23 (Kattegat, Belts, and Sound)	Trends assessment	3.1.0
ple-2432	Plaice in Subdivisions 24 - 32 (Baltic Sea)	Trends survey	320
ple-7b-c	Plaice in Division VIIb,c (West of Ireland)	Catch only	6.2.0
ple-7h-k	Plaice in Divisions VIIh-k (Southwest of Ireland)	Trends assessment	4.1.3
ple-89a	Plaice in Subarea VIII and Division IXa	Catch only	5.2.0
ple-celt	Plaice in Divisions VIIf,g (Celtic Sea)	Trends assessment	3.2.0
ple-eche	Plaice in Division VIId (Eastern Channel)	Trends assessment	3.1.0
ple-echw	Plaice in Division VIIe (Western Channel)	Analytic	1
ple-iris	Plaice in Division VIIa (Irish Sea)	Trends assessment	3.2.0
ple-skag	Plaice in Subdivision 20 (Skagerrak)	Trends survey	3.2.0
ple-nsea	Plaice Subarea IV (North Sea)	Analytic	1
pol-89a	Pollack in Subarea VIII and Division IXa	Catch only	5.2.0
pol-celt	Pollack in Subareas VI and VII (Celtic Sea and West of Scotland)	Trends assessment	4.1.2
	Pollack in Subarea IV and Division IIIa	Trends cpue/lpue	5.2.0
por-nea	Porbeagle (Lamna nasus) in the Northeast Atlantic	Catch only	5.3.0
rai 347d	Other ray and skate species in Subarea IV, and Divisions IIIa and VIId (North Sea, Skagerrak, Kattegat, and Eastern English Channel)	Catch only (data not species specific)	5.2.0
rai-89a	Other skates and rays in Subarea VIII and Division IXa (Bay of Biscay and Atlantic Iberian waters)	Catch only (data not species specific)	5.2.0
raj-celt	Other ray and skate species in the Celtic Sea ecoregion	Catch only (data not species specific)	6.3.0
	Rays and skates (mainly thornback ray) in the Azores and Mid-Atlantic Ridge	Trends survey	3.2.0
rib-347d	Common skate (Dipturus batis) complex (Dipturus cf. flossada and Dipturus cf. intermedia) in Subarea IV, and Divisions IIIa and VIId (North Sea, Skagerrak, Kattegat, and Eastern English Channel)	Catch only (data not species specific)	6.3.0
rjb-89a	Common skate (Dipturus batis) complex (flapper skate Dipturus cf. flossada and blue skate Dipturus cf. intermedia) in Subarea VIII and Division IXa (Bay of Biscay and Atlantic Iberian waters)	Catch only (data not species specific)	5.2.0
rjb-celt	Common skate, Dipturus batis complex (flapper skate (Dipturus cf. flossada) and blue skate (Dipturus cf. intermedia)) in the Celtic Sea ecoregion	Trends survey	3.1.4
rjc-347de	Thornback ray (Raja clavata) in Subarea IV, and Divisions IIIa and VIId,e (North Sea, Skagerrak, Kattegat, and English Channel)	Trends survey	3.2.0
ric-7afg	Thornback ray (Raja clavata) in Divisions VIIa, f, g (Irish and Celtic Sea)	Trends survey	3.2.0
ric-bise	Thornback ray (Raja clavata) in Subarea VIII (Bay of Biscay and Cantabrian Sea)	Trends survey	3.2.0
rjc-pore	Thornback ray (Raja clavata) in Division IXa (west of Galicia, Portugal, and Gulf of Cadiz)	Trends survey	5.2.0

ric-VI	Thornback ray (Raja clavata) in Subarea VI (West of Scotland)	Trends survey	3.2.0
rje-7fg	Small-eyed ray (Raja microocellata) in Divisions VIIf, g (Celtic Sea)	Trends survey	3.2.0
rje-ech	Small-eyed ray (Raja microocellata) in Divisions VIId, e (English Channel)	Catch only (data not species specific)	6.2.0
rjf-celt	Shagreen ray (Leucoraja fullonica) in the Celtic Sea ecoregion	Catch only (data not species specific)	5.2.0
rjh-4c7de	Blonde ray (Raja brachyuran) in Divisions IVc and VIId, e (Southern North Sea and English Channel)	Catch only (data not species specific)	5.2.0
rjh-7afg	Blonde ray (Raja brachyura) in Divisions VIIa, f, g (Irish and Celtic Sea)	Trends survey	5.2.0
rjh-pore	Blonde ray (Raja brachyura) in Division IXa (west of Galicia, Portugal, and Gulf of Cadiz)	Trends survey	5.2.0
rjh-VI	Blonde ray (Raja brachyura) in Subarea VI (West of Scotland)	Catch only (data not species specific)	5.2.0
rji-celt	Sandy ray (Leucoraja circularis) in the Celtic Sea ecoregion	Catch only (data not species specific)	5.2.0
rim-347d	Spotted ray (Raja montagui) in Subarea IV, and Divisions IIIa and VIId (North Sea, Skagerrak, Kattegat, and Eastern English Channel)	Trends survey	3.2.0
rim-7afg	Spotted ray (Raja montagui) in Divisions VIIa, f, g (Irish and Celtic Sea)	Trends survey	3.2.0
rim-bisc	Spotted ray (Raja montagui) in Subarea VIII (Bay of Biscay and Cantabrian Sea)	Catch only (data not species specific)	5.2.0
rim-pore	Spotted ray (Raja montagui) in Division IXa (west of Galicia, Portugal, and Gulf of Cadiz)	Catch only (data not species specific)	5.2.0
rim-VI	Spotted ray (Raja montagui) in Subarea VI (West of Scotland)	Trends survey	3.2.0
rin-347d	Cuckoo ray (Leucoraja naevus) in Subarea IV, and Divisions IIIa and VIId (North Sea, Skagerrak, Kattegat, and Eastern English Channel)	Trends survey	3.2.0
rjn-bisc	Cuckoo ray (Leucoraja naevus) in Subarea VIII (Bay of Biscay and Cantabrian Sea)	Trends survey	3.2.0
rjn-celt	Cuckoo ray (Leucoraja naevus) in the Celtic Sea ecoregion	Trends survey	5.2.0
rjn-pore	Cuckoo ray (Leucoraja naevus) in Division IXa (west of Galicia, Portugal, and Gulf of Cadiz)	Catch only (data not species specific)	5.2.0
rir-347d	Starry ray (Amblyraja radiata) in Subarea IV, and Divisions IIIa and VIId (North Sea, Skagerrak, Kattegat, and Eastern English Channel)	Trends survey	3.2.0
rin-7i	Undulate ray (Raja undulata) in Division VIIj (Great Sole Bank)	Catch only (data not species specific)	6.3.0
riu-ech	Undulate ray (Raja undulata) in Divisions VIId, e (English Channel)	Catch only (data not species specific)	6.3.0
rng-1012	Roundnose grenadier (Coryphaenoides rupenstris) in Mid-Atlantic Ridge (Xb, XIIc, Va1, XIIa1, XIVb1)	Catch only	5.2.0
rng-5b67	Roundnose grenadier (Coryphaenoides rupenstris) in Subareas VI and VII, and Divisons Vb and XIIb	Analytic	1
rng-kask	Roundnose grenadier (Coryphaenoides rupenstris) in Division IIIa	Catch only	6.3.0
ing kusk	Roundnose grenadier (Coryphaenoides rupenstris) in all other areas (I, II, IV, Va2, VIII, IX, XIVa, and	Catch only	6.2.0
rng-oth sai-3a46	XIVb2) Saithe in Subarea IV (North Sea) Division IIIa West (Skagerrak) and Subarea VI (West of Scotland and Bockall)	Analytic	1
sai-faro	Saithe in Division Vb (Faroe Saithe)	Analytic	
sai-icel	Saithe in Division Va (Icelandic saithe)	Analytic	-
san-ns1	Sandeel in the Dogger Bank area (SA 1)	Analytic	-
san-ns2	Sandeel in the South Eastern North Sea (SA 2)	Analytic	
san-ns3	Sandeel in the Central Eastern North Sea (SA 3)	Analytic	-

san-ns4	Sandeel in the Central Western North Sea (SA 4)	Trends assessment	-
san-ns5	Sandeel in the Viking and Bergen Bank area (SA 5)	Catch only	-
san-ns6	Sandeel in Division IIIa East (Kattegat, SA6)	Catch only	
san-ns7	Sandeel in the Shetland area (SA 7)	Catch only	-
san-scow	Sandeel in Division Vla	Catch only	6
sar-soth	Sardine in Divisions VIIIc and IXa	Analytic	1
sbr-678	Red (=blackspot) seabream (Pagellus bogaraveo) in Subareas VI, VII and VIII	Catch only	6.2.0.
sbr-ix	Red (=blackspot) seabream (Pagellus bogaraveo) in Subarea IX	Catch only	6.2.0
sbr-x	Red (=blackspot) seabream (Pagellus bogaraveo) in Subarea X (Azores region)	Trends survey	3.2.0
sck-nea	Kitefin shark (Dalatias licha) in the Northeast Atlantic	Analytic	5.3.0
smr-arct	Golden Redfish (Sebastes marinus) in Subareas I and II		
smn-arct	Beaked Redfish (Sebastes mentella) in Subareas I and	Trends assessment	3
smn-con	Beaked Redfish (Sebastes mentella) in Division Va and Subarea XIV (Icelandic Slope stock)	Trends survey	-
smn-dp	Beaked Redfish (Sebastes mentella) in Subareas V, XII, XIV and NAFO Subareas 1+2 (Deep Pelagic stock > 500 m deep)	Trends survey	3
smn-grl	Beaked Redfish (Sebastes mentella) in Subarea XIVb (Demersal)	Trends survey	3
smn-sp	Beaked Redfish (Sebastes mentella) in Subareas V, XII, XIV and NAFO Subareas 1+2 (Shallow Pelagic stock < 500 m deep)	Trends survey	3
smr-5614	Golden Redfish (Sebastes marinus) in Subareas V, VI, XII and XIV	Trends survey	3
sol-7b-c	Sole in Division VIIb, c (West of Ireland)	Catch only	6.2.0
sol-7h-k	Sole in Divisions VIIh-k (Southwest of Ireland)	Trends assessment	4.1.3
sol-8c9a	Sole in Divisions VIIIc and IXa	Catch only	5.2.0
sol-bisc	Sole in Divisions VIIIa,b (Bay of Biscay)	Analytic	1
sol-celt	Sole in Divisions VIIf, g (Celtic Sea)	Analytic	1
sol-eche	Sole in Division VIId (Eastern Channel)	Analytic	1
sol-echw	Sole in Division VIIe (Western Channel)	Analytic	1
sol-iris	Sole in Division VIIa (Irish Sea)	Analytic	1
sol-kask	Sole in Division IIIa and Subdivisions 22-24 (Skagerrak, Kattegat, and the Belts)	Analytic	1
sol-nsea	Sole in Subarea IV (North Sea)	Analytic	1
spr-2232	Sprat in Subdivisions 22 - 32 (Baltic Sea)	Analytic	1
spr-celt	Sprat in the Celtic Sea and West of Scotland	Catch only	5.2.0
spr-ech	Sprat in Divisions VIId,e	Trends cpue/lpue	5.2.0
spr-kask	Sprat in Division IIIa (Skagerrak - Kattegat)	Trends survey	5.2.0
spr-nsea	Sprat in Subarea IV (North Sea)	Analytic	5.2.0
svc-347d	Lesser-spotted dogfish (Scyliorhinus canicula) in Division IIIa (Skagerrak and Kattegat), Subarea IV (North Sea), and Division VIId (eastern Channel)	Trends survey	3.2.0
syc-8c9a	Lesser-spotted dogfish (Scyliorhinus canicula) in Divisions VIIIc and IXa (Atlantic Iberian waters)	Trends survey	3.2.0
syc-bise	Lesser-spotted dogfish (Scyliorhinus canicula) in Divisions VIIIa,b,d (Bay of Biscay)	Trends cpue/lpue	3.2.0
syc-celt	Lesser-spotted dogfish (Scyliorhinus canicula) in Subarea VI and Divisions VIIa–c, e–j (Celtic Sea and west of Scotland)	Trends survey	3.2.0
trk-nea	Smoothhounds (Mustellus sp) in the Northeast Atlantic	Trends survey	3.2.0

tur-2232	Turbot in Subdivisions 22 - 32 (Baltic Sea)	Trends survey	3.2.0
tur-nsea	Turbot in Subarea IV	Analytic	-
tur-kask	Turbot in Division IIIa	Survey trends based assessment	3
usk-arct	Tusk in Subareas I and II (Arctic)	Trends cpue/lpue	5.2.0
usk-icel	Tusk in Division Va and XIV	Analytic	1
usk-mar	Tusk in Division XIIb (Mid Atlantic Ridge)	Catch only	6
usk-oth	Tusk in Divisions IIIa, IVa, Vb, VI, VII, VIII, IX and XIIa (other areas)	Trends cpue/lpue	3.2.0
usk-rock	Tusk in Division Vb (Rockall )	Trends cpue/lpue	3.2.0
whb-comb	Blue whiting in Subareas I-IX, XII and XIV (Combined stock)	Analytic	1
whg-47d	Whiting Subarea IV (North Sea) & Division VIId (Eastern Channel)	Analytic	1
whg-7e-k	Whiting in Division VIIe-k	Analytic	1
whg-89a	Whiting in Subarea VIII and Division IXa	Catch only	5.2.0
whg-iris	Whiting in Division VIIa (Irish Sea)	Trends survey	2.1.3
whg-kask	Whiting in Division IIIa (Skagerrak - Kattegat)	Catch only	5.2.0
whg-rock	Whiting in Division VIb (Rockall)	Catch only	6.2.0
whg-scow	Whiting in Division VIa (West of Scotland)	Analytic	2.1.3
wit-nsea	Witch in Subarea IV, Division IIIa and VIId	Survey trends based assessment	3

# *Appendix VII* **Expert groups providing best practice guidance for sampling commercial and recreational fisheries.**

Commercial fishe	ries					
WKACCU	ICES Workshop on Methods to Evaluate and Estimate the Accuracy of					
	Fisheries Data used for Assessment					
WKPRECISE	ICES Workshop on methods to evaluate and estimate the precision of fisheries					
	data used for assessment					
WKMERGE	ICES Workshop on methods for merging metiers for fishery based sampling					
WKPICS	ICES Workshop on Practical Implementation of Catch Sampling					
WKPICS2	ICES Workshop on Practical Implementation of Catch Sampling					
Recreational fisheries						
WGRFS	ICES Working Group on Recreational Fisheries Surveys					

# Appendix VIII

# List of the surveys which are eligible in the DCF

Name of the survey	Acronym	Area	Period	Main targeted species etc	Survey effort- Days (Maximum)	Countries involved	Evaluate d by SGRN 10-03	SGRN 10-03 score	Used in assessments/source
Baltic Sea (ICES areas IIIb	-d)								
Baltic International Trawl Survey	BITS Q1	IIIaS, IIIb-d	1 <sup>st</sup> and 4th Quarter	Cod and other demersal species	160	DNK,GER, SWE, POL, EST, LIT, LAT, <i>(RUS)</i>	у	1	Yes/ICES feedback_Master Stock Table
	BITS Q4					DNK, FIN, GER, SWE, POL, EST, LIT, LAT	у	1	Yes/ICES feedback_Master Stock Table
Baltic International Acoustic Survey (Autumn)	BIAS	IIIa, IIIb-d	Sep-Oct	Herring and sprat	115	DNK, FIN, GER, SWE, POL, EST, LIT , LAT, (RUS)	у	1	Yes/ICES feedback_Master Stock Table
Gulf of Riga Acoustic Herring Survey	GRAHS	IIId	3 <sup>rd</sup> Quarter	Herring	10	EST, LAT,	у	1	Yes/ICES feedback_Master Stock Table
Sprat Acoustic Survey	SPRAS	IIId	May	Sprat and herring	60	GER, LIT, LAT, (RUS)	у	1	Yes/ICES feedback_Master Stock Table
Rügen Herring Larvae Survey	RHLS	IIId	March-June	Herring	50	GER	у	1	Yes/ICES feedback_Master Stock Table
North Sea (ICES areas IIIa	, IV and VIId)	and Eastern Arctio	c (ICES areas I a	nd II)					
International Bottom Trawl Survey	IBTS Q1	IIIa, IV	1st and 3 <sup>rd</sup> Quarter	Haddock, Cod, Saithe, Herring, Sprat, Whiting,	315	DNK, GER, SWE, FRA, NDL, UK(S)	у	1	Yes/ICES feedback_Master Stock Table
	IBTS Q3			Mackerel, Norway pout.		DNK, GER, SWE, UK(S&E), <i>(NOR)</i>	у	1	Yes/ICES feedback_Master Stock Table
North Sea Beam Trawl Survey	BTS	IVb,IVc,VIId	3rd Quarter	Plaice, Sole	65	GER, BEL, NDL, UK(E)	v	1.3	Yes/ICES feedback_Master Stock Table

Dem	ersal Young Fish Survey	DYFS	Coasts of NS	3 <sup>rd</sup> and4th Quarter	Plaice, sole, brown shrimp	145	GER, BEL, NDL,	у	1.55	Yes/ICES feedback_Master Stock Table comment: "UK stopped it but would still be useful if continued"
Sc	le Net Survey	SNS	IVb, IVc	3rd Quarter	Sole, Plaice	20	NDL	у	1.25	Yes/ICES feedback_Master Stock Table
North S	ea Sandeels Survey	NSSS	IVa, IVb	4 <sup>th</sup> Quarter	Sandeels	15	DNK, UK(S) <i>(NOR)</i>	у	1.25	Yes/ICES feedback_Master Stock Table
Interna Survey	ational Ecosystem in the Nordic Seas	ASH	IIa	May	Herring, Blue whiting	35	DNK, GER, SWE, NDL, IRL, UK, (NOR, FRO, ISL, RUS)	у	1.05	¿-? (different acronym IESNS)
Redf Nor ac	ish Survey in the wegian Sea and jacent waters	REDNOR	Π	August- September	Redfish	35	GER, SPA, POR, (NOR, FRO, RUS)	у	1.1	ICES feedback
Mac	kerel egg Survey (Triennial)	NSMEGS	IV	May-July	Mackerel egg production	15	NDL, (NOR)	у	1.1	Yes/ICES feedback_Master Stock Table
Herri	ng Larvae survey	IHLS	IV,VIId	1 <sup>st</sup> and 3 <sup>rd</sup> Quarter	Herring, Sprat Larvae	45	GER, NDL	у	1.1	Yes/ICES feedback_Master Stock Table
NS I	Ierring Acoustic Survey	NHAS	IIIa, IV,VIa	June, July	Herring, Sprat	105	DNK, GER, NDL, UK(S), (NOR)	у	1.05	YES/ICES feedback_Master Stock Table (different acronym HERAS)
Nephr	ops Tvsurvey (FU 3&4)	NTV3&4	IIIA	2 <sup>nd</sup> or 3 <sup>rd</sup> Quarter	Nephrops	15	DNK, SWE,	у	1.7	Yes/ICES feedback_Master Stock Table
Nephrop	os TVsurvey (FU 6)	NTV6	IVb	September	Nephrops	10	UK(E)	у	1.3	Yes/ICES feedback_Master Stock Table
Nephrop	s TVsurvey (FU 7)	NTV7	IVa	2 <sup>nd</sup> or 3 <sup>rd</sup> Quarter	Nephrops	20	UK(S)	у	1.3	Yes/ICES feedback_Master Stock Table
Nephrop	s TVsurvey (FU 8)	NTV8	IVb	2 <sup>nd</sup> or 3 <sup>rd</sup> Quarter	Nephrops	10	UK(S)	у	1.3	Yes/ICES feedback_Master Stock Table
Nephrop	os TVsurvey (FU 9)	NTV9	IVa	2 <sup>nd</sup> or 3 <sup>rd</sup> Quarter	Nephrops	10	UK(S)	у	1.3	Yes/ICES feedback_Master Stock Table

North Atlantic (ICES Areas	V-XIV and N	AFO areas)							
International Redfish Trawl and Acoustic Survey (Biennial)	REDTAS	Va, XII, XIV; NAFO SA 1-3	June/July	Redfish	30	GER (ICE, RUS, NOR)	у	1.05	Yes/ICES feedback_Master Stock Table
Flemish Cap Groundfish survey	FCGS	3M	July	Demersal species	35	SPA, POR	у	1.05	NAFO Area. Not applicable to ICES
Greenland Groundfish survey	GGS	XIV, NAFO SA1	October/Nove mber	Cod, redfish and other demersal species	55	GER,	у	1.05	Yes/ICES feedback_Master Stock Table
3LNO Groundfish survey	PLATUXA	3LNO	2 <sup>nd</sup> and 3 <sup>rd</sup> Quarter	Demersal species	55	SPA	у	1.05	NAFO Area. Not applicable to ICES
Western IBTS 4th quarter (including Porcupine survey)	IBTS Q4	VIa, VII, VIII, IXa	4 <sup>th</sup> Quarter	Demersal species	215	FRA, IRL, POR, SPA, UK(E&W, NI, S)	у	1	Yes/ICES feedback_Master Stock Table
Scottish Western IBTS	IBTS Q1	VIa,VIIa	March	Gadoids, herring, mackerel	25	UK(S)	у	1	Yes/ICES feedback_Master Stock Table
ISBCBTS September	ISBCBTS	VIIa f g	September	Sole, Plaice	25	UK(E&W)	у	1	Yes/ICES feedback_Master Stock Table
WCBTS	VIIe BTS	VIIe	October	Sole, Plaice, Anglerfish, Lemon sole	10	UK(E&W)	у	1.05	<i>∖</i> -?
Blue whiting survey	BWS	VI, VII	1 <sup>st</sup> and 2 <sup>nd</sup> Quarter	Blue whiting	45	DNK, GER, IRL, NDL, SPA, UK, FRA, POR, SWE, (FRO, NOR, RUS)	у	1.1	Yes/ICES feedback_MasterStock Table (different acronym IBWSS)
International Mackerel and Horse Mackerel Egg Survey (Triennial)	MEGS	VIa, VII,VIII, IXa	January-July	Mackerel, Horse Mackerel egg production	310	GER, IRL, NDL, POR, SPA, UK (NOR)	У	1.05	Yes/ICES feedback_Master Stock Table
Sardine, Anchovy Horse Mackerel Acoustic Survey		VIII, IX	March-April- May	Sardine, Anchovy, Mackerel, Horse Mackerel abundance indices	95	FRA, POR, SPA	v	1.15	Yes/ICES feedback_Master Stock Table
Sardine DEPM (Triennial)	DEPM	VIIIc, IXa	2 <sup>nd</sup> and 4 <sup>th</sup> Quarter	Sardine SSB and use of CUFES	135	POR, SPA	y	1.05	Yes/ICES feedback_Master Stock Table
Spawning/Pre spawning Herring acoustic survey	SPSHAS	VIa, VIIa-g	July, Sept, Nov, March,	Herring, Sprat	155	IRL, UK(S)	y	1	<i>i.</i> -?

			Jan						
	DIOMAN		М		25				
Biomass of Anchovy	BIOMAN	VIII	Мау	Anchovy SSB (DEP)	25	SPA	У	1.05	Yes/ICES feedback_Master Stock Table
Nephrops UWTV survey (offshore)	UWTV (FU 11-13)	VIa	2 <sup>nd</sup> or 3 <sup>rd</sup> Quarter	Nephrops	20	UK(S)	У	1.25	Yes/ICES feedback_Master Stock Table
Nephrops UWTV Irish Sea	UWTV (FU 15)	VIIa	August	Nephrops	10	IRL, UK(NI)	у	1.25	Yes/ICES feedback_Master Stock Table
Nephrops UWTV survey Aran Grounds	UWTV (FU 17)	VIIb	June	Nephrops	10	IRL	у	1.25	Yes/ICES feedback_Master Stock Table
Nephrops UWTV survey Celtic Sea	UWTV (FU 20-22)	VIIg,h,j	July	Nephrops	10	IRL	у	1.35	Yes/ICES feedback_Master Stock Table
Nephrops TV Survey Offshore Portugal	UWTV (FU 28-29)	IXa	June	Nephrops	20	POR	У	1.15	Yes/ICES feedback_Master Stock Table
						· · · · · · · · · · · · · · · · · · ·			
Mediterranean waters and	l Black sea								
Mediterranean waters and Mediterranean International bottom trawl survey	I Black sea MEDITS*	GSA 1, GSA 2, GSA 3, GSA 5, GSA 6, GSA 7, GSA 8, GSA 9, GSA 10, GSA 11, GSA 15, GSA 16, GSA 17, GSA 18, GSA 19, GSA 20, GSA 22, GSA 23, GSA 25	2 <sup>nd</sup> and 3 <sup>rd</sup> Quarter	Demersal species	410	FRA, ITA, MAL, SLO, CYP, SPA, GRE, CRO, <i>(ALB, MON, MOR)</i>	Y	1.15	Yes/SGMED, GFCM working groups

Bottom Trawl Survey	GSA 29	2 <sup>nd</sup> and 4 <sup>th</sup> Quarter	Turbot	40	ROM, BUL	Y	1.3	Yes/SGMED, GFCM working groups
Pelagic Trawl Survey	GSA 29	2 <sup>nd</sup> and 4 <sup>th</sup> Quarter	Sprat and Whiting	40	ROM, BUL	Y	1.2	Yes/SGMED, GFCM working groups

\* Croatia will enter officialy in the survey

\*\* RCMMed&BS, following the requested of the Medias steering Committee, proposed to extend the MEDIAS survey in other two Geographical Sub Areas (GSA 9 and GSA 10)

Proposed new/modified surveys for inclusion on DC-MAP											
Name of the survey	Acronym	Area	Period	Main targeted species etc	Survey effort-Days (Maximum)	Countries involved	evaluated in SGRN 10-03	SGRN 10-03 score	Used in assessments/source:	Inclusion proposed by	
North Atlantic (ICES Areas V	/-XIV and NAI	FO areas)									
UK-Western IBTS Quarter 1	UK-WIBTS Q1	VIIa e f g h	Q1	flatfish, demersal, shellfish, crustaceans,	?	UK	n		Not applicable. New survey	RCM NA 2011,2012	
DEPM anchovy Gulf of Cádiz	BOCADEVA	IXa south	June-July	anchovy	14	ESP	у	1.5	Yes/ICES feedback_Master Stock Table	RCM NA 2012	
Spanish "Pelagic Ecosystem" Acoustic Survey-Gulf of Cádiz	ECOCADIZ	IXa south	June-July	anchovy	14	ESP	у	1.45	Yes/ICES feedback_Master Stock Table	RCM NA 2012	
Combined Scottish and Irish anglerfish and megrim trawl survey	AMISS-Q2	IV-VI	Q2	anglerfish, megrim	?	UK	n		Yes/ICES feedback_Master Stock Table	RCM NA 2012	
UK Scotland Rockall Survey	Rock- WIBTS-Q3	VIb	Q3	haddock	?	UK	у	1	Yes/ICES feedback_Master Stock Table	RCM NA 2012	
Nephrops Porcupine UWTV survey	UWTV- FU16	VIIbejk		Nephrops		IRL	n		Yes/ICES feedback_Master Stock Table	RCM NA 2011	

Mediterranean waters and Bl	lack sea								
Pelagic juvenile survey in Black Sea	GSA 29	autumn (3rd-4th quarter)	Engraulis encrasicolus and Trachurus trachurus	15	ROM, BUL	у	1.5	Not applicable. New survey/SGMED, GFCM working groups	RCMMed&BS 2012

# Appendix IX List of surveys proposed by RCM's which are not eligible in the DCF

Blue fin tuna aerial survey		GSA 5; GSA 6; GSA 7; GSA 10; GSA 11; GSA 16; GSA 18; GSA 19	summer (2-3 quarter)	Thunnus thynnus	90	FRA, ITA, ESP	Y	1,4	Not applicable. New survey/SGMED, GFCM working groups	RCMMed&BS 2012
Trawl survey in the Mediterranean	TSMEDI	GSA 9, GSA 10, GSA 11, GSA 15, GSA 16, GSA 17, GSA 18, GSA 19, GSA25	autumn- winter (4 quarter)	Demersal species	260-270	ITA	Y	1.15	Not applicable. New survey/SGMED, GFCM working groups	RCMMed&BS 2012
Beam trawl survey - North Adriatic	ARTS	GSA 17	winter (4 quarter)	Solea vulgaris	15	ITA, SLO, CRO	Y	1.05	Not applicable. New survey/SGMED, GFCM working groups	RCMMed&BS 2012

urveys having high score by SGRN 10-03, but not included in current DCF or proposed for inclusion in DC-MAP											
Name of the survey	Acronym	Area	Period	Main targeted species etc	Survey effort-Days (Maximum)	Countries involved	Evaluated by SGRN 10-03	SGRN 10-03 score	Used in assessments/source:		
North Atlantic (ICES Areas V	-XIV and NAI	FO areas)									
Autumn suveys on juvenals	ESP	у	1.05	not in ICES feedback_Master Stock Table							

*Appendix X* List of surveys indicated in the ICES feed back document to the DC-MAP which are not included in Annexes E or F.

Surveys used in assessment	but not included i	in current D	CF or prop	osed for incl	lusion in DC	Z-MAP
Name of the survey	Acronym	Area	Countries involved	Evaluated by SGRN 10-03	SGRN 10- 03 score	Used in assessments/source:
Baltic Sea (ICES areas IIIb						
	GERAS	22-24	Germany	n		Yes/ICES feedback_Master Stock Table
	HERAS	22-24		n		Yes/ICES feedback_Master Stock Table

North Sea (ICES areas IIIa, IV and VIId) an Arctic (ICES areas I and II)				
Havfisken-Q1	Kattegat	DNK	n	Yes/ICES feedback_Master Stock Table
Havfisken-Q4	Kattegat	DNK	n	Yes/ICES feedback_Master Stock Table
ScoGFS-Q3		UK	n	Yes/ICES feedback_Master Stock Table
EngGFS-Q3		UK	n	Yes/ICES feedback_Master Stock Table
HERAS			n	Yes/ICES feedback_Master Stock Table

CGFS		n		Yes/ICES feedback_Master Stock Table
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North Atlantic (ICES Areas V-XIV and NAFO areas)					
,	NIGFS-WIBTS-	UK(NI)	n		Yes/ICES feedback_Master Stock
	Q1				Table
	UK(E&W)-	UK(E&W)	n		Yes/ICES feedback_Master Stock
	BTS-3Q		11		Table
	NIMIK	UK(NI)		1.65	Yes/ICES feedback Master Stock
			У	1.05	Table
	UK(E&W)-Fsp-	UK(E&W)			Yes/ICES feedback Master Stock
	E	, ,	n		Table
	UK(E&W)-Fsp-	UK(E&W)			Yes/ICES feedback Master Stock
	W		n		Table
	UKGFS-	UK	10		Yes/ICES feedback_Master Stock
	WIBTS-Q1		11		Table
	AC(VIIaN)	UK(NI)		17	Yes/ICES feedback_Master Stock
			У	1./	Table
	NINEL	UK(NI)	×.	1.95	Yes/ICES feedback_Master Stock
			у	1.05	Table
	Q1 SW Beam		n		Yes/ICES feedback_Master Stock
			11		Table
	SAR	POR	<b>N</b> /	1 45	Yes/ICES feedback_Master Stock
			у	1.43	Table
	LANGOLF	FRA	N/	2.05	Yes/ICES feedback_Master Stock
			у	2.03	Table
	SPGFS-WIBTS-	SPA	<b>N</b> /	1 1 5	Yes/ICES feedback_Master Stock
	Q1		у	1.13	Table
	ORHAGO	FRA	<b>N</b> /	1 45	Yes/ICES feedback_Master Stock
			У	1.43	Table
	ARQDACO(P)	POR	у	1.45	Yes/ICES feedback_Master Stock

						Table
-	<del>FO-GFS-Q1</del>	-	Faroe	n	-	Yes/ICES feedback_Master Stock
-	<del>FO-GFS-Q3</del>	_	Faroe	n	-	Yes/ICES feedback_Master Stock Table
	IR-acous-BoarF		IR	n		Yes/ICES feedback_Master Stock Table
	SDS		UK(S)	у	1.15	Yes/ICES feedback_Master Stock Table

Mediterranean waters and Black sea				

# Appendix XI

#### List of Economic variables for the fleet

Variable group	Variable	Specification for the collection of data <sup>19</sup>	Unit	<u>C=Core</u> O=Optional
Income	Gross value of landings	Transversal	Euro	<u>C</u>
	Income from leasing out quota or other fishing rights		Euro	<u>C</u>
	Direct-Ssubsidies- <sup>4[see</sup> PGECON discussion]		Euro	<u>C</u>
	Other income (including interest) $(income)^2$		Euro	<u>C</u>
Personnel Labour costs	Wages and salaries of erew <sup>3</sup> Personal costs (including wages, saleries and social security)		Euro	<u>C</u>
	Imputed value of unpaid labour <sup>4</sup>		Euro	<u>C</u>
			Euro	
Energy costs	Energy costs <u>(refunds included -&gt;</u> <u>definition)</u> <sup>5</sup>		Euro	<u>C</u>
Repair and maintenan ce costs	Repair and maintenance costs <sup>6</sup>		Euro	<u>C</u>
Other	Variable costs <sup>7</sup>		Euro	<u>C</u>
operati <u>ng</u> o	Non-variable costs <sup>8</sup>		Euro	<u>C</u>
hai costs	Lease/rental payments for quota or other fishing rights		Euro	<u>C</u>
Capital costs	<u>Consumption of fixed</u> <u>capital</u> <del>Annual depreciation<sup>9</sup></del>		Euro	<u>C</u>
Financial				
<u>and</u> <u>depreciatio</u> n costs	Interest costs			C
Capital value	Value of physical capital: depreciated replacement value <sup>10</sup>		Euro	
	Value of physical capital: depreciated historical value <sup>10</sup>		Euro	<u>C</u>
	Value of quota and other fishing rights <sup>11</sup>		Euro	<u>C</u>
Investment s	Investments in physical capitaltangible assets, net <sup>12</sup>		Euro	<u>C</u>
	Investment subsidies			0
Financial position	DebtDebt/asset ratio <sup>13</sup>		%	<u>C</u>
	Total assets			<u>C</u>
Employme	Engaged crew <sup>14</sup>		Number	<u>C</u>
III	Unpaid Labour		Number	<u>C</u>
	FTE National <sup>45</sup>		Number	<u>C</u>
	<u>FTE harmonised<sup>16</sup>Total</u> <u>hours worked per year</u> (this allows still the comparison between MS)		Number	<u>C</u>

Fleet Fisher	Number	Transversal	Number	<u>C</u>
<u>ies data</u>	Mean LOA	Transversal	Metres	<u>C</u>
<u>But per</u> segment –	Mean- <u>Total</u> vessel's tonnage	Transversal	GT	<u>C</u>
not move to	Mean- <u>Total</u> vessel's power	Transversal	kW	<u>C</u>
transversal	Mean age	Transversal	Years	<u>C</u>
Effort	Days at sea	Transversal	Days	<u>C</u>
	Energy consumption		Litres	<u>C</u>
Number of fishing enterprises /units (Total fleet, not by fleet segments)	Number of fishing enterprises/units <sup>17</sup>	By size category: 1) owned vessel 2) 2-5 owned vessels 3) >5 owned vessels	Number	<u>C</u>
<b>Production</b>	Value of landings per	Transversal	Euro	
species	Average price per species <sup>18</sup>	Transversal	Euro/kg	
Social	Employment by gender			С
indicators	Employment by age			С
Collected	Employment by education level			0
years	Employment by nationality			0

1 Includes direct payments, e.g., compensation for stopping fishing, refunds of fuel duty or similar lump sum compensation payments. Excludes social benefit payments, indirect subsidies, e.g., reduced duty on inputs such as fuel, investment subsidies. [Review subsidies in line with PGECON discussion]

2 Includes other income from use of the vessel, e.g., recreational fishing, tourism, oil rig duty, etc, also insurance payments for damage/loss of gear/vessel.

3 Including social security costs.

4 For example, the vessel owner's own labour. Chosen methodology should be explained by the Member State in their National Programme.

5 Excluding lubrication oil. Broken down by type if possible (petrol, diesel, biofuel, etc.),

6 Gross costs of maintenance and repairs to vessel and gear

7 Includes all purchased inputs (goods and services) related to fishing effort and/or catch/landings.

8 Includes purchased inputs not related to effort and/or catch/landings (including leased equipment).

9 Estimated according to [the proposed PIM methodology in the capital valuation report of study NoFISH/2005/03:"IREPA Onlus Co-ordinator, 2006. Evaluation of the capital value, investments and capital costs in the fisheries sector Study N° FISH/2005/03, 203p."]. The data and estimation procedures should be explained in the National Programme.

10 Value of the vessel, i.e., the hull, engine, all onboard equipment and the gear. Estimated according to [the proposed PIM methodology in the capital valuation report of study No FISH/2005/03 "IREPA Onlus Coordinator, 2006. Evaluation of the capital value, investments and capital costs in the fisheries sector Study N° FISH/2005/03, 203p."]. The data and estimation procedures should be explained in the National Programme. 11 Where appropriate. Methodology for estimation to be explained in the National Programme.

12 Improvements to existing vessel/gear during the given year

13 % debt in relation to total capital value (as defined above)

14 Number of jobs on board, equal to the average number of persons working for and paid by the vessel. This includes temporary crew as well as rotation crew. [see report of Study FISH/2005/14, "LEI WAGENINGENUR Co-ordinator, 2006. Calculation of labour including full-time equivalent (FTE) in fisheries Study N° FISH/2005/14, 142 p"]

15 Full time equivalent (FTE) based on the national reference level for FTE working hours of the crew members on board the vessel (excluding resting time) and the working hours onshore. If the annual working hours per crew member exceed the reference level, the FTE equals 1 per crew member. If not, the FTE equals the ratio between the hours worked and the reference level. [The methodology should be in accordance with the Study FISH/2005/14, "LEI WAGENINGENUR Co-ordinator, 2006. Calculation of labour including full-time equivalent (FTE) in fisheries Study N° FISH/2005/14, 142 p." and amended by the SGECA 07 01 report (15–19 January 2007, Salerno, 21 p. +annexes) and should be explained in the national programmes.]

16 Full-time equivalent (FTE) based on a threshold of 2000 hours per FTE using the same methodology referred to in footnote 15.

17 Situation at 1st of January as defined in the fleet register. Shared ownership (involving more than one person) should be regarded as one unit.

18 Prices in Euro per kilo live weight.

19 Economic variables are to be collected on an annual basis at the C3 level (Appendix V) with the exception of those identified as transversal variables and collected at more disaggregated levels (as defined in the Appendix VIII) and periodicity.

20 ESA refers to European System of Accounts 1995 (EU Reg. 2223/96, EU Reg. 1267/2003. Eurostat ESA 1995 manual).

Variable group	Variable	Specification	Unit	
				C= Core
				<u>O=Optional</u>
Income	Turnover	Per species	Euro	<u>C</u>
	Subsidies <sup>‡</sup>		Euro	<u>C</u>
	Other income		Euro	<u>C</u>
	Financial income		<u>Euro</u>	<u>C</u>
	Extraordinary income		<u>Euro</u>	<u>C</u>
Personnel <u>Labour</u>	Wages and		Euro	<u>C</u>
	Imputed Vyalue of		Euro	С
	unpaid labour <sup>3</sup>		Luio	<u> </u>
Energy costs	Energy costs		Euro	<u>C</u>
Raw material	Livestock costs		Euro	<u>C</u>
costs	Feed costs		Euro	<u>C</u>
Repair and	Repair and maintenance		Euro	<u>C</u>
maintenance costs	Other operational		Euro	C
operating <del>onal</del>	costs <sup>4</sup>		Euro	
costs				
Capital costs <sup>5</sup>	Depreciation of capital		Euro	<u>C</u>
	Financial costs		Euro	<u>C</u>
 Fytraordinary	<del>, net</del> Extraordinary costs net		Euro	
costs <del>, net</del>	Extraordinary costs		Euro	С
Canital value <sup>8</sup>	Total value of assets		Euro	<u><u> </u></u>
Capital value	(total balance sheet or		Euro	<u> </u>
	only capital employed?)			
Investments	Net Investments <sup>4</sup>		Euro	<u>C</u>
Debt <sup>10</sup>	Debt		Euro	С
Dequ	2.00		2010	<u> </u>
Raw material	Livestock		Ton	<u>C</u>
Volume	Fish Feed		Ton	<u>C</u>
Volume of Sales <sup>12</sup>	Volume of Sales	Per species	Ton <sup>13</sup>	<u>C</u>
Employment	Number of persons	By Gender	Number	<u>C</u>
	ETE National <sup>14</sup>	By Gender <sup>15</sup>	Number	С
	Unpaid labour	By Gender	Number	<u>c</u>
1	Total number of hours	<u>Dy Gender</u>	Number	C
	worked/year		<u>Indifioer</u>	<u> </u>
Number of	Number of enterprises	By size category	Number	С
enterprises	(to be given at national	where the number	1 (01110 01	<u> </u>
	level see STECF 1201)	of persons		
		employed is: (SBS		
		1. ≤ 5		
		2. 6-10		
0	Encolorment 1	3. > 10		
Social indicators Collected every	Employment by age			
Concercu every	Employment by	1	1	

#### Appendix XII List of economic variables for the aquaculture sector (include new social and economic variables from STECF 13-01 see fiche)

Variable group	Variable	Specification	Unit	
				<u>C= Core</u>
				O=Optional
<u>three years</u>	employment status			
	Employment by education level			<u>0</u>
	Employment by nationality			<u>0</u>

1. Includes direct payments, e.g. compensation for stopping trading, refunds of fuel duty or similar lump sum compensation payments; excludes social benefit payments and indirect subsidies, e.g. reduced duty on inputs such as fuel or investment subsidies.

2. Including social security costs.

3. Chosen methodology should be explained by the Member State in their National Programme.

4. Packaging costs are included in other operational costs.

5. Chosen methodology should be explained by the Member State in their National Programme.

6. ESA refers to European System of Accounts 1995 (EU Reg. 2223/96, EU Reg. 1267/2003. Eurostat ESA 1995 manual).

7. Interest costs of capital; interest on the national 5 year Government bonds may be used as proxy for financial costs

8. At the end of the year

9. Purchase and Sale of assets during the year

10. At the end of the fiscal year

11. The variable for raw material volume should correspond to the variable on raw material cost.

12. The variable for production volume should correspond to the variable on turnover value

13. Conversion factors from numbers to tonnes should be stated in the National Programme

14. FTE National is number of full time equivalent estimated from a national threshold

15. Optional

	Fish farming te	Fish farming techniques <sup>1</sup>							Shellfish farming techniques <sup>1</sup>		
	Land based far	ms					Cages				
	Hatcheries and Nurseries <sup>2</sup>	On growing	Combined <sup>3</sup>	Recirculation systems	Enclosures and pens	<u>Tanks</u> <u>and</u> <u>raceways</u>	Cages <sup>4</sup>	Rafts	Long line	Bottom <sup>5</sup>	Other
Salmon											
Trout											
Sea bass & Sea bream											
Carp											
<u>Eel</u>											
<u>Tuna</u>											
Other fresh water fish											
Other marine fish											
Mussel											
Oyster											
Clam											
Other shellfish											
Algaes and other aquatic organisms											

Appendix XIII Sector segmentation to be applied for the collection of aquaculture data: [ To align with EUROSTAT]

1. Enterprises should be segmented according to their main farming technique.

2. Hatcheries and nurseries are defined as places for the artificial breeding, hatching and rearing through the early life stages of aquatic animals. For statistical purposes, hatcheries are limited to the production of fertilised eggs. Further juveniles stages of aquatic animals are considered being produced in nurseries. When hatcheries and nurseries are closely associated, statistics shall refer only to the latest juvenile stage produced. (COM (2006) 864 of 19 July 2007)

3. Combined is defined as enterprises using hatcheries, nurseries and on growing techniques.

4. Cages are defined as open or covered enclosed structures constructed with net, mesh or any porous material allowing natural water interchange. These structures may be floating, suspended or fixed to the substrate but still permitting water interchange from below. (COM (2006) 864 of 19 July 2007)

5. "Bottom" techniques cover shellfish farming in inter tidal areas (directly on the ground or surelevated)

# Appendix XIV

List of economic variables for the processing industry sector include new social and economic variables	
from STECF 13-01 see fiche To be aligned with Eurostat data collection)	

Variable group	Variable	Specification	Unit	<u>C=Core</u>
				<u>O=Optional</u>
Income	Turnover		Euro	<u>C</u>
	Subsidies <sup>‡</sup>		Euro	<u>C</u>
	Other income		Euro	<u>C</u>
	Financial income			
	Extraordinary income			
Personnel- <u>Labour</u> Costs	Wages and salaries of staff <sup>2</sup> Personal costs		Euro	<u>C</u>
	$\frac{\text{Imputed } \mathbf{v}\underline{V}}{\text{labour}^3}$ alue of unpaid		Euro	<u>C</u>
	Payment for external agency workers		<u>Euro</u>	<u>0</u>
Energy costs	Energy costs		Euro	<u>C</u>
Raw material <del>costs</del>	Purchase of fish <del>and other</del> raw material for production By species By origin		<del>Euro<u>kg</u></del>	<u>O</u>
	The raw material costs will be then part of the other operational costs (following SBS)			2
Other operational costs	Other operational costs <sup>+</sup>		Euro	<u><u>C</u></u>
Capital costs <sup>5</sup>	Depreciation of capital		Euro	<u>C</u>
	Financial costs <del>, net<sup>7</sup></del>		Euro	<u>C</u>
Extraordinary costs <del>,</del> <del>net</del>	Extraordinary costs <del>, net</del>		Euro	<u>C</u>
Capital value <sup>8</sup>	Total value of assets (including cash?)		Euro	<u>C</u>
Net Investments	Net Investments <sup>9</sup>		Euro	<u>C</u>
Debt <sup>10</sup>	Debt		Euro	<u>C</u>
Employment	Number of persons employed	By Gender	Number	<u>C</u>
	FTE National <sup>11</sup>	By Gender <sup>12</sup>	Number	<u>C</u>
	Unpaid labour	By Gender	<u>Number</u>	<u>C</u>
Number of enterprises	Number of enterprises	By size category where the number of persons employed (16.11.0) is: $1. \le \frac{1020}{2.241 - 49}$ 3.50 - 249 4. > 250	Number	C
<u>\$ocial indicators</u>	Employment By age		<u>Number</u>	<u>C</u>
	Employment by employment status			<u>C</u>
	Employment by education level			<u>0</u>

Variable group	Variable	Specification	Unit	<u>C=Core</u> <u>O=Optional</u>
	Employment by nationality			<u>0</u>

1. Includes direct payments. Excludes social benefit payments and indirect subsidies.

2. Including social security costs.

3. Chosen methodology should be explained by the Member State in their National Programme.

4. Packaging costs are included in other operational costs.

5. Chosen methodology should be explained in the National Programme.

6. ESA refers to European System of Accounts 1995 (EU Reg. 2223/96, EU Reg. 1267/2003. Eurostat ESA 1995 manual).

7. Interest costs of capital; interest on the national 5 years Government bonds may be used as proxy for financial costs

8. Total accumulated value of all net investments in the enterprise at the end of the year.

9. Purchase and Sale of assets during the year

10. At the end of the year

11. Methodology should be as discussed in the report of Study FISH/2005/14, "LEI WAGENINGENUR Coordinator, 2006. Calculation of labour including full time equivalent (FTE) in fisheries Study N° FISH/2005/14, 142 p.

12. Optional

# Appendix XV

# Draft Glossary of definitions and key terms relating to Data Collection

Term	Definition(s) & [source]	Advantages & disadvantages in case of alternative definitions	Inclusion/ non- inclusion/ amendment in DC-MAP	Rationale for inclusion/non- inclusion/amendment in DC-MAP
General terms				
fisheries sector	activities related to commercial fisheries, recreational fisheries, aquaculture and industries processing fisheries products [Reg. 199/2008]		inclusion	full coverage of sector
aquaculture	rearing or cultivation of aquatic organisms using techniques designed to increase the production of the organisms in question beyond the natural capacity of the environment; where the organisms remain the property of a natural or legal person throughout the rearing or culture stage, up to and including harvesting [Reg. 1198/2006, Reg. 199/2008; CFP Basic reg.]		inclusion	standard definition
Aquaculture products	aquatic organisms at any stage of their life cycle resulting from any aquaculture activity or products derived therefrom [CFP Basic reg.]		Inclusion	Standard definition
recreational fisheries	non-commercial fishing activities exploiting living aquatic resources for recreation or sport [Reg. 199/2008]	advantage: covers marine and diadromous species (eel, salmon), as well as freshwater species if needed	amendment, see alternative	covers recreational fisheries on all aquatic resources
	non-commercial fishing activities exploiting <u>marine</u> living aquatic resources for recreation, <u>tourism</u> or sport [Reg. 1224/2009]	disadvantage: covers only marine species	non- inclusion	all aquatic species should be covered; 'tourism' can be regarded as 'recreation'
	non-commercial fishing activities exploiting living aquatic resources [STECF EWG 13-05]	<u>advantage</u> : covers all species, all non- commercial fisheries.	inclusion	Covers non-commercial fisheries on all aquatic resources; non- commercial implies all forms other than commercial so no need to specify recreation or sport.

Term	Definition(s) & [source]	Advantages & disadvantages in case of alternative definitions	Inclusion/ non- inclusion/ amendment in DC-MAP	Rationale for inclusion/non- inclusion/amendment in DC-MAP
primary data	data associated with individual vessels, natural persons, or legal persons or individual samples [Reg. 199/2008]	Disadvantage: other legal entities than persons missing	amendment, see alternative	standard definition
	data associated with individual vessels, natural persons, legal entities or individual samples [STECF EWG 13-05]	Advantage: inclusion of entities other than persons	inclusion	Covers business entities.
detailed data	data based on primary data in a form which does not allow natural persons or legal entities to be identified directly or indirectly [Reg. 199/2008]	Disadvantage: Not reflecting entities mentioned under primary data	Amendment see alternative	standard definition
detailed data	data based on primary data in a form which does not allow individual vessels, natural persons, legal entities or individual samples to be identified directly or indirectly [STECF EWG13-05]	Advantage: in line with primary data definition	inclusion	Covers business entities now, in line with primary data.
aggregated data	output resulting from summarising the primary or detailed data for specific analytic purposes [Reg. 199/2008]		inclusion	standard definition
Personal data	any information relating to an identified or identifiable natural person. hereinafter referred to as 'data subject'; an identifiable person is one who can be identified, directly or indirectly, in particular by reference to an identification number or to one or more factors specific to his or her physical, physiological, mental, economic, cultural or social identity [Reg 45/2001]	Disadvantage: text not correct. Delete 'herinafter referred to as 'data subject'	amendment	Modified standard definition
end-users	bodies with research or management interest in the scientific analysis of data in the fisheries sector [Reg. 199/2008, CFP Basic Reg. proposal]	disadvantage: not all end-user categories covered	amendment (see alternative definition)	'public debate' is an end- user category that should be covered
	bodies with interest in the scientific analysis of data in the fisheries sector for research, management or public debate purposes [STECF EWG 13-02 report]	advantage: all end-user categories covered disadvantage: no prioritisation of end- users	inclusion	all end-user categories covered. Prioritisation not to be included in definition
Term	Definition(s) & [source]	Advantages & disadvantages in case of alternative definitions	Inclusion/ non- inclusion/ amendment in DC- MAP	Rationale for inclusion/non- inclusion/amendment in DC-MAP
--------------------------	--	---	--	---
Vessels & fleets				
fishing vessel	any vessel equipped for commercial exploitation of living aquatic resources [Reg. 2371/2002, Reg. 1224/2009]		inclusion	standard definition
Community fishing vessel	fishing vessel flying the flag of a Member State and registered in the Community [Reg. 2371/2002]		inclusion	standard definition
active vessels	vessels that have been engaged in any fishing operation (more than 0 days) during a calendar year. A vessel that has not been engaged in fishing operations during a year is considered 'inactive' [Decision 2010/93/EU]	Disadvantage: Not in line with definition list. Not any type of vessel, but fishing vessels only	amendment	Amended standard definition
	Fishing vessels that have been engaged in any fishing operation (more than 0 days) during a calendar year. A vessel that has not been engaged in fishing operations during a year is considered 'inactive' [STECF EWG 13-05]	Advantage: in line with definition list	inclusion	Amended standard definition
population of vessels	all vessels in the Community Fishing Fleet Register as defined in Commission Regulation (EC) No 26/2004 [Decision 2010/93/EU] at any time during the reference year [STECF PLEN 10- 02 report, p. 17]		amendment	vessels entering the fleet during the year are covered
Predominant fishing gear	Fishing gear in use by a vessel by more than the sum of all other gears in use. [STECF EWG 13-05]		inclusion	Definition was missing in current regulations
fleet segment	group of vessels with the same length class (LOA) and predominant fishing gear during the year (,according to the Appendix III). Vessels may have different fishing activities during the reference period, but might be classified in only one fleet segment [Decision 2010/93/EU]		Amendment, see alternative	simpler definition

group of fishing vessels with the same length	amendment	simpler definition and
class (LOA) and predominant fishing gear,		specification of type of
operating within the same supra-region during the		vessel in line with
calendar year [Amended from Decision		definitions
2010/93/EU, by STECF EWG 13-05]		

Term	Definition(s) & [source]	Advantages & disadvantages in case of alternative definitions	Inclusion/ non- inclusion/ amendment in DC-MAP	Rationale for inclusion/non- inclusion/amendment in DC-MAP
Vessel activity				
fishing operation	all activities in connection with searching for fish, the shooting, towing and hauling of active gears, setting, soaking, removing or resetting of passive gears and the removal of any catch from the gear, keep nets, or from a transport cage to fattening and farming cages [Reg. 404/2011]	Disadvantage: only referring to fish	amended, see alternative	harmonised with Control Reg.
	all activities in connection with searching for living aquatic resources, the shooting, towing and hauling of active gears, setting, soaking, removing or resetting of passive gears and the removal of any catch from the gear, keep nets, or from a transport cage to fattening and farming cages [amended from Reg. 404/2011 by STECF EWG13-05]	Advantage: in line with other definitions by including all living aquatic resources	inclusion	harmonised with Control Reg. except for small modification
Economic segment	DEFINITION NEEDED [SOURCE]	Advantage:	Inclusion	
operational unit	group of fishing vessels which are engaged in the same type of fishing operation within the same Geographical Sub-Area, targeting the same species or group of species and belonging to the same economic segment [GFCM]		inclusion	standard definition
fishing trip	any voyage by a fishing vessel from a land location to a landing place, excluding non-fishing trips (a trip by a fishing vessel from a location to a land location during which it does not engage in fishing activities and during which any gear on board is securely lashed and stowed and not available for immediate use) [Decision 2010/93/EU]	disadvantage: too complex	non-inclusion	unnecessarily complex
	any voyage of a fishing vessel during which fishing activities are conducted that starts at the moment when the fishing vessel leaves a port and ends on arrival in port [Reg. 404/2011]		inclusion	harmonised with Control Reg.
fishing effort	product of the capacity and the activity of a fishing vessel; for a group of fishing vessels, it is the sum of the fishing effort of all vessels in the group [Reg. 2371/2002 CFP Basic Reg.]		inclusion	standard definition
days at sea	any continuous period of 24 hours (or part thereof) during which a vessel is present within an area and absent from port [Decision 2010/93/EU]		inclusion	clear and concise

fishing days	each day is attributed to the area where the most fishing time was spent during the relevant day at sea. However, for passive gears, if no operation took place from the vessel during a day while at least one (passive) gear remained at sea, that day will be associated to the area where the last setting of a fishing gear was carried out on that fishing trip [Decision 2010/93/EU]		Amendment, see alternative	too complex;
	Any day at sea with fishing operation. In case of passive gears, each day of a remained operational gear counts as fishing day and is associated to the fishing trip during which the gear was deployed. [STECF EWG13-05]	Advantage: all fishing operations including exception for passive gears	inclusion	Simplification and clearification of definition
soaking time	time calculated from the point where each individual unit of gear has been set, to the time when the same unit starts to be removed [Decision 2010/93/EU]		inclusion	sufficiently clear
metier	group of fishing operations targeting a similar (assemblage of) species, using similar gear, during the same period of the year and/or within the same area and which are characterised by a similar exploitation pattern [Decision 2010/93/EU]		inclusion	sufficiently clear
mesh size range	range of mesh sizes of fishing nets as determined in accordance with Regulation (EC) No 517/2008 [TAC&Q, e.g. Reg. 39/2013]		amendment: add 'range (of)'	'mesh size range' is often referred to in the metier approach, effort management etc.

Term	Definition(s) & [source]	Advantages & disadvantages in case of alternative definitions	Inclusion/ non- inclusion/ amendment in DC-MAP	Rationale for inclusion/non- inclusion/amendment in DC-MAP
Species & stock	<u>s</u>			
living aquatic resources	available and accessible living marine aquatic species, including anadromous and catadromous species during their marine life [Reg. 2371/2002]	disadvantage: includes aquatic plants	amendment: available and accessible living aquatic species	should cover not only marine biological resources
	available and accessible living aquatic species [STECF EWG13-05]	disadvantage: includes aquatic plants. advantage: includes all species including fresh water	inclusion: available and accessible living aquatic species	should cover not only marine biological resources
marine biological resources	available and accessible living marine aquatic species, including anadromous and catadromous species during their marine life [CFP Basic Reg. proposal – still being negotiated]	Disadvantage: estuarine species missing. Simplyfication possible	amendment see alternative	in order to distinguish marine from fresh water resources
	available and accessible living aquatic species in marine waters, including diadromous species during the marine phase of their life cycle [STECF EWG13-05]	Advantage: simplification by grouping cata- and anadromous species. Marine waters are already well defined see footnote.	inclusion	in order to distinguish marine from fresh water resources
fresh water biological resources	available and accessible living fresh water aquatic species [CFP Basic Reg. proposal]	Disadvantage: Not in line with marine biological resources	amendment see alternative	in order to distinguish fresh water from marine resources

	available and accessible living fresh water aquatic species,	Advantage: In line	inclusion	in order to distinguish
	including diadromous species during the fresh water phase of their	with marine		fresh water from
	life cycle [STECF EWG 13-05]	species and		marine resources
		simplification by		
		grouping cata- and		
		anadromous		
		species		
stock	a living aquatic marine biological resource that occurs in a given		inclusion	standard definition
	management area [Reg. 2371/2002 CFP Basic Reg.]			
selected species	species of relevance for management purposes and for which a		non-inclusion	not necessary, as
	request is made by an international scientific body or a regional			RFMOs usually ask
	fisheries management organisation [Decision 2010/93/EU]			for data for stocks, not
				species

Term	Definition(s) & [source]	Advantages & disadvantages in case of alternative definitions	Inclusion/ non- inclusion/ amendment in DC-MAP	Rationale for inclusion/non- inclusion/amendment in DC-MAP
Sampling			·	
Sampler	staff operating under the at-sea monitoring scheme and designated by the body in charge of the implementation of the Annual Work Plans for Data Collection [modified from Reg. 199/2008 art. 10 and 11]		Inclusion, but amended as below	NEW term; important to include in order to distinguish sampling staff from '(official) observers' (control & inspection) and 'scientific observers'. Proposed definition is slightly modified from Reg. 199/2008 (art. 10 and 11), but had not been part of the definitions in Reg. 199/2008 art. 2.
	A person appointed to collect information under the Member State's Data Collection Programme.	Advantage: All types of sampling staff and observers are covered under this definition. Disadvantage: Definitions for official observers and scientific observers required.	inclusion	NEW term; important to include in to cover al types of sampling staff including e.g. official observers, fishermen collecting samples, scientific observers
Official observer	A person appointed to observe fishing operations in the context of law enforcement, control and inspection and designated by the Member State's control and enforcement bodies. [STECF EWG 13-05]			
Scientific observer	A person appointed to observe fishing operations in the context of data collection for scientific or management purposes and designated by a body in charge of the implementation of (parts of) the Annual Work Plans for Data Collection. [STECF EWG 13-05]			

concurrent sampling	sampling all or a predefined assemblage of		inclusion (if	only include if the
1 0	species, simultaneously in a vessel's catches or		needed)	concurrent sampling
	landings [Decision 2010/93/EU]		,	concept is still relevant
target population	population for which information is required,		inclusion	is being used in current
	e.g., the commercial catch of a species that is			National Programmes
	landed in a country [ICES WKMERGE report]			e
sampling frame	list of all individuals or sampling units that can	Disadvantage: Not in	Amendment, see	is being used in current
	be selected independently with known	line with terminology.	alternative,	National Programmes
	probability by randomised sampling. The frame			(termed 'frame population
	may represent the entire population of interest or			
	may be incomplete because not all sampling units			
	are accessible for sampling. [ICES WKMERGE			
	report]			
	list of all individuals or primary sampling units	Advantage: In line with	Inclusion	is being used in current
	that can be selected independently with known	terminology		National Programmes
	probability by randomised sampling. The frame			(termed 'frame population
	may represent the entire population of interest or			
	may be incomplete because not all sampling units			
	are accessible for sampling. [adapted from ICES			
	WKMERGE report, by STECF EWG13-05]			
primary sampling unit	units of the target population that can be selected		inclusion	is being used in current
	for sampling, e.g. vessel, trip, day [ICES			National Programmes
	WKMERGE report]			
research survey at sea	series of trips carried out on a research vessel or		amended	NEW term; important to
	vessel dedicated for scientific research for stock		compared to fiche.	include, as currently
	(and ecosystem) monitoring			undefined
	A voyage dedicated to the collection of data for		Inclusion	NEW term; important to
	scientific purposes, carried out by a vessel			include, as currently
	designated for this task. [STECF EWG13-05]			undefined
Term	Definition(s) & [source]	Advantages &	Inclusion/ non-	Rationale for
		disadvantages in case	inclusion/ amendm	ent inclusion/non-
		of alternative	in DC-MAP	inclusion/amendme
		definitions		in DC-MAP
Regions & areas				
marine regions	geographical areas set out in Annex I to Council		inclusion	standard definition
	Decision 2004/585/EC and the areas established			
	by the regional fisheries management			
	organisations [Reg. 199/2008, EMFF proposal]			

Supra-region	Geographical areas grouped for data collection	[NOTE: Final	inclusion	Definition was
	purposes.	definition should refer		missing
		to the description of		-
		respective supra		
		regions like current		
		Appendix II, Comm.		
		Dec. 93/2010		
Baltic Sea/North Sea and	Follow definitions in CFP	[NOTE: STECF		
Eastern Arctic/ North		EWG13-05 is of the		
Atlantic/ Mediterranean		opinion that the		
Sea and Black Sea/ Other		definitions as		
regions		described in the fiche		
		are not sufficient nor		
		in line with current		
		CFP definitions.		
		These definitions		
		should be followed.		
		For regional		
		coordination		
		purposes, other		
		regional definitions		
		<u>might apply.</u>		
fishing ground	(group of) geographical units based on existing			NEW term; important
	areas defined by Regional Fisheries Management			to include, as
	Organisations or scientific bodies			currently undefined

## Footnote:

Re: definition of <u>marine waters</u> vs. inclusion/exclusion of <u>estuarine species</u> Clarification – step by step:

# Definition of the **ESTUARY**

Estuary - "a semi-enclosed body of water connected to the sea as far as the tidal limit or the salt intrusion limit and receiving freshwater runoff; however the freshwater inflow may not be perennial, the connection to the sea may be closed for part of the year and tidal influence may be negligible"

This definition includes classical estuaries as well as fjords, lagoons, river mouths, and tidal creeks.

<u>Source</u>: <u>http://en.wikipedia.org/wiki/Estuary</u> (after: Wolanski, E. (2007). *Estuarine Ecohydrology*. Amsterdam: Elsevier. ISBN 978-0-444-53066-0.)

# Definitions of the **MARINE WATERS**

Comment - basic reference for the definition of the marine waters is UNCLOS (UN Convention on the Law of the Sea). For the purpose of our report and definition of key terms we shall limit our consideration to marine waters categorized as territorial sea, internal (marine) waters, coastal waters and transitional waters.

We shall also have in mind the marine waters definitions in other relevant EU legislation.

(underlining in texts of definitions below by me)

<u>**Territorial Sea**</u> (the Breath of) - "Every State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this Convention."

Source: UNCLOS, Art. 3

<u>Internal waters</u> – "… waters on the landward side of the baseline of the territorial sea form part of the internal waters of the State."

Source: UNCLOS, Art. 8

### <u>Marine waters –</u>

(a) waters, the seabed and subsoil on the seaward side of the baseline from which the extent of territorial waters is measured extending to the outmost reach of the area where a Member State has and/or exercises jurisdictional rights, in accordance with the <u>Unclos</u>, with the exception of waters adjacent to the countries and territories mentioned in Annex II to the Treaty and the French Overseas Departments and Collectivities; and

(b) <u>coastal waters</u> as defined by <u>Directive 2000/60/EC</u>, their seabed and their subsoil, in so far as particular aspects of the environmental status of the marine environment are not already addressed through that Directive or other Community legislation; <u>Source</u>: DIRECTIVE 2008/56/EC (MSFD), Art. 3.1

<u>**Coastal waters</u>** - "Coastal water" means surface water on the landward side of a line, every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breadth of territorial waters is measured, extending where appropriate up to the outer limit of transitional waters. <u>Source</u>: DIRECTIVE 2000/60/EC (Water Policy Directive), Art. 2.7</u>

<u>**Transitional waters**</u> – "Transitional waters" are bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows.

Source: DIRECTIVE 2000/60/EC (Water Policy Directive), Art. 2.6

Conclusions:

- In terms of definitions of marine waters used in the EU legislation, an <u>estuarine species</u> are those species inhabiting (living) in the <u>transitional waters</u>.
- Transitional waters are part of <u>coastal waters</u>.
- Coastal waters are the <u>marine waters</u>.
- Thus, the <u>estuarine species</u> are those species living in marine waters and, therefore, are covered by the definition of the "marine biological resources" and there is no need for a separate definition of the estuarine species.

# Other key terms

STECF EWG13-03 agrees that, as mentioned in the Fiche, for the following terms, the Food and Agriculture Organization of the United Nations (FAO) definitions (www.fao.org/fi/glossary/default.asp) shall apply:

- anadromous species (to be grouped into diadromous species, see note)
- catadromous species (to be grouped into diadromous species, see note)
- catches
- cephalopods
- crustaceans
- deep water species
- demersal fish
- demersal species
- exploitation pattern
- finfish
- fresh water species
- gears
- landings
- discards
- large pelagic fish
- molluses
- other activity than fishing
- pelagic fish
- small pelagic fish
- target species

Note: regarding anadromous and catadromous species, STECF EWG13-05 suggests to replace these terms by diadromous species for which the existing FAO definition can be used.

European Commission

EUR 26095 EN - Joint Research Centre - Institute for the Protection and Security of the Citizen

Title: Scientific, Technical and Economic Committee for Fisheries, Review of DC MAP - Part 2 (STECF-13-12).

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Luxembourg: Publications Office of the European Union

2013 - 84 pp. - 21 x 29.7 cm

EUR – Scientific and Technical Research series – ISSN 1831-9424 (online), ISSN 1018-5593 (print)

ISBN 978-92-79-32528-1

doi:10.2788/96031

#### Abstract

The Expert Working Group meeting of the Scientific, Technical and Economic Committee for Fisheries EWG 13-05 was held from 10 - 14 June 2013 in Ispra -Italy, to evaluate Consultation Document proposed by DG MARE on the new EU Multi-annual programme for data collection (DC MAP) 2014-2020. In particular The group focussed on Block B and D of the Consultation Document and made comments and proposals for amendments to the two Blocks in relation to: Data required for assessing the level of fishing – transversal data, Data required for assessing the state of exploited marine biological resources and the impact of fishing activities on the marine biological resources, Data required for assessing the social and economic performance of fisheries, aquaculture and processing sector. The report was reviewed by the STECF during its summer meeting in July 2013.

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The Scientific, Technical and Economic Committee for Fisheries (STECF) has been established by the European Commission. The STECF is being consulted at regular intervals on matters pertaining to the conservation and management of living aquatic resources, including biological, economic, environmental, social and technical considerations.



