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

# EU MAP and template for National Work Plan (STECF-16-07) 

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This report was reviewed by the STECF during its 51st plenary meeting held from 11 to 15 April 2016 in Brussels, Belgium.

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#### Abstract

Commission Decision of 25 February 2016 setting up a Scientific, Technical and Economic Committee for Fisheries, C(2016) 1084, OJ C 74, 26.2.2016, p. 4-10. The Commission may consult the group on any matter relating to marine and fisheries biology, fishing gear technology, fisheries economics, fisheries governance, ecosystem effects of fisheries, aquaculture or similar disciplines. This is the report of the EWG 16-01 meeting held in Hamburg, Germany, from 7 to 11 March 2016, to address the following Terms of Reference given by the Commission: critically assess a draft EU Multi-annual Programme (EU MAP) for Data Collection and to develop templates and formats for National Work Plans under the revised Data Collection Framework (DCF). The report from the EWG has been presented to the STECF Spring plenary for its reviewing and advice.


## TABLE OF CONTENTS

EU MAP and template for National Work Plan (STECF-16-07) ..... 2
Expert Working Group EWG-16-01 report ..... 6
1 Introduction ..... 7
1.1 Terms of Reference for EWG-16-01 ..... 7
2 Part I: Preparation of future EU MAP ..... 9
2.1 Biological sampling of fisheries and stocks ..... 9
2.1.1 Introduction ..... 9
2.1.2 Chapter I - Definitions ..... 10
2.1.3 Chapter II - Data requirements ..... 10
2.1.4 Chapter III - Research surveys at sea ..... 14
2.1.5 Chapter IV - Thresholds ..... 15
2.1.6 RCG agreements ..... 16
2.2 Economic and transversal variables ..... 16
2.2.1 Chapter I - Definitions ..... 16
2.2.2 Chapter II - Data requirements ..... 18
2.2.3 Chapter IV - Thresholds ..... 22
2.2.4 Modification of tables related to transversal and economic data ..... 22
3 Part II: Preparation of National Work Plan Template ..... 25
3.1 General sections ..... 25
3.2 Sampling of marine fisheries ..... 26
3.2.1 Modification of tables related to sampling of marine fisheries ..... 27
3.3 Sampling of anadromous and catadromous species ..... 29
3.4 Recreational fisheries ..... 30
3.5 Surveys ..... 33
3.6 Economic and transversal variables ..... 34
4 References ..... 37
5 CONTACT DETAILS OF STECF MEMBERS AND EWG-16-01 List of Participants ..... 39
6 List of Annexes ..... 48
7 List of Background Documents ..... 48
8 Annex 1 - Draft EU MAP with "track changes" by the EWG 16-01 ..... 49
9 Annex 2 - Draft Work Plan Decision with "track changes" by the EWG 16-01 ..... 114

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

EU MAP and template for National Work Plan (STECF-16-07)<br>THIS REPORT WAS REVIEWED DURING THE PLENARY MEETING HELD IN Brussels, Belgium, 11-15 April 2016

## 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.

## Observations of the STECF

STECF observes that, according to the terms of reference, the meeting of EWG 16-01 addressed two different tasks:

1. to provide expertise on outstanding issues of the future EU Multi-annual programme;
2. to provide expertise for the preparation of the National Work Plan template.

STECF observes that the meeting was organized with a very short notice and the tasks were rather complex to be addressed in only one meeting. However, STECF recognizes that the level of participation was high and covered all the required expertise with the exception of sustainability of aquaculture which, for this reason, was not assessed. EWG 16-01 referred to the DCF workshop on aquaculture (Gydnia, 2015) where the issue of sustainability of aquaculture was discussed.

STECF also observes that the legal set up for the future data collection framework is still not completely defined and this increased the time necessary to clarify and address the terms of reference. The revision of the Data Collection Framework (Council regulation (EC) No. 199/2008) is still under negotiation. Therefore, the discussions on EUMAP only reflect the principles reported in the version of the re-cast available at the moment of the meeting.

## The future EU Multi-annual programme

Concerning the preparation of future EU MAP, the EWG 16-01 was required to critically assess if the basic principles of the DCF re-cast and the major recommendations by STECF have been taken into account in the draft EU MAP where deemed necessary.

STECF notes that the EWG worked on the draft "Commission Decision adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors", using the "track changes" mode for proposing amendments and provided explanations and comments on those changes in the report of the meeting.

STECF observes that the proposed version of EU MAP has been produced in compliance with the basic principles of the DCF re-cast and the previous STECF recommendations, as it contains several suggestions for including the regionalization approach and for establishing sampling plans according to statistical sound principles.

STECF notes that the EWG 16-01 amended the list of definitions by deleting the redundant ones, adding the missing ones and changing some of them. In particular, STECF observe that EWG suggested changing the definition of "fishing days" according to the conclusion of the DCF workshop on transversal variables (Cyprus, February 2016).

STECF observes that EWG suggested a roadmap for evaluation and updating the list of mandatory surveys. In line with proposals of previous STECF meetings, as well as RCMs in 2015, and not to disrupt current well-established surveys, the EWG agreed that the EU MAP shall contain a basic list of mandatory internationally coordinated surveys, however, this list shall be evaluated against updated eligibility criteria. Once this evaluation is completed, the list of mandatory surveys shall be updated.

STECF notes that EWG discussed the issue of thresholds and suggested to maintain the current provisions of the DCF because thresholds for national work plans should be considered as interim measures only prior to the development and implementation of regional sampling plans through which regionally coordinated sampling and task-sharing would accommodate data collection requirements.

Regarding economic data, STECF observes that EWG proposed to include the fleet segmentation in the EUMAP and suggests re-define the population for aquaculture and processing enterprises

STECF observes that the proposal of the EWG to collect data on annual investments for inactive vessels is questionable and should not be considered for inclusion in the EU MAP. The collection of such variable for the inactive vessels will imply the implementation of a specific survey and therefore it will require too much sampling effort compared to the information that will be gained.

STECF observes that EWG discussed the role of PGECON and the need to have a clear legal establishment of this group at the same level of Regional Coordination Groups. The task for PGECON is to advice on definitions, methodologies and best practices for the collection of economic and transversal data.

STECF notes that the EWG reviewed the tables to be included in the EUMAP. The revision is in line with previous STECF and RCM recommendations. However, STECF observes that Table 1D (List of species to be monitored because of species protection programmes in the EU or under international obligations) is not referred in the text of the EU MAP and it contains redundant information compared to previous tables which already include list of species to be monitored.

Preparation of the National Work Plan (NWP) template

Under the EMFF, the MS Operational Programmes must be supplemented by a work plan for data collection (Reg. 508/2014, Article 21), which will replace the National Programme. This work plan will be submitted by Member States to COM for the first time on 31st October 2016 in a specified format (Article 4(4) of Regulation (EC) No 199/2008). The content of the work plan must be consistent with Article 4(2) of that Regulation, referring to multi-annual sampling plans, schemes for at sea monitoring, surveys and data use. COM needs to provide Member States with a template for the work plan before the summer, to allow for sufficient time for preparation. In addition, there is a need to streamline existing reports on data collection, namely Operational Programmes and Annual Reports (ARs), and avoid duplication of information.

STECF observes that the EWG 16-01 was invited to critically assess the draft National Work Plan template and guidelines as proposed by COM and improve it where necessary. The aim was to develop a template that is streamlined with existing templates and in line with the emerging EU MAP, as well as end user needs.

STECF notes that to address this issue the EWG was provided by the European Commission with a draft "Commission Implementing Decision laying down rules on procedures, format and timetables for the submission of work plans for data collection". In addition, the EWG reviewed the work done by two experts contracted ad-hoc by the Commission prior to the meeting with the aim to prepare draft tables and explanatory notes on changes suggested regarding the NWP tables.

STECF observes that the focus of the exercise was on simplification, user-friendly formatting and standardisation. Guidance consideration has been given to make the NWP template more relevant for evaluation and statistical analysis, to simplify the tables, and where possible to look to the potential to automate table production with standard software and data formats.

STECF notes that the EWG 16-01 suggests keeping the table "National Organisation" and to include a clarification about national organisation and coordination of data collection in the new WP structure. The EWG suggests including a table "Data availability", where the name of the data sets and timing when the final data will be available are provided.

STECF notes that considerable changes are suggested in the WP templates for the sampling of fisheries, prompted by 1 ) the move to probability-based sampling methods and, 2) the introduction of regional sampling plans.

Regarding surveys, STECF notes that an additional table was suggested to include information on data dissemination and use in advice.

Regarding economic data, STECF notes that the EWG suggested to provide all necessary information about economic data collection in only one table for fishery, two tables for aquaculture and one table for fish processing. STECF notes that this suggestion fully addresses the aim of simplification.

STECF notes that substantial changes have been suggested for the section on activity data. The previous NP table "Transversal Variables Data collection strategy" was changed into the new table "Fishing Activity Variables Data collection strategy". The new table provides a link between economic and biological modules through the new included columns: Supra-region; Fleet
segment; Metiers (level 6). The data sources, either Control Regulation or complementary data collection, should be clearly stated for each variable group or variable in the case different sources should be used within a specific variable group.

## STECF conclusions

STECF concludes that the EWG 16-01 fully addressed all Terms of Reference.
STECF endorses the proposed guidelines and standard tables prepared by EWG 16-01 for the EUMAP.

STECF agrees with the roadmap for evaluation and updating the list of mandatory surveys. According to this roadmap, a dedicated STECF EWG should be convened at the beginning of 2017 to evaluate all surveys according to predefined and updated criteria. This EWG will then propose the list of mandatory surveys to be included in EU MAP.

STECF concludes that the EU MAP will improve the general framework of the data collection in terms of data requirements and end user's needs. Even if one of the basic principles considered in the preparation of the future EU MAP is to keep homogeneity in time-series, STECF is aware that some of the proposed changes compared with the present DC MAP (EU Decision 93/2010) may have an impact on sampling activities as well as on final estimates. In these cases, an assessment of the proposed changes is needed. STECF considers that the implementation and functioning of the EU MAP need to be monitored at national and EU level to allow future adjustments if necessary.

STECF concludes that collection of investments for inactive vessels should not be included in the EUMAP.

As far as the template for NWP, STECF concludes that the preliminary work done by EWG 16-01 fully addresses the terms of reference. The proposed set of standard tables have been produced in compliance with the aim of simplification, as requested by the Commission, as they contain several suggestions for deletion of redundant information and guidance on definitions and on reporting requirements. In addition, the proposed set of standard tables has been drafted with the aim of standardisation (possibility to use standards for completion of both NWP and Annual Report) and automatically compilation.

STECF considers that NWP template text in Chapter 2, "data to be collected in accordance with the new multi-annual Union programme" should make reference to the EU MAP and not repeat the text.

STECF endorses the proposed guidelines and standard tables prepared by EWG 16-01 and recommends that their finalization will happen as soon as possible in order to provide Member States with new reporting formats and guidance to be applied for the forthcoming programming period (NWP 2017-2020 to be submitted by Member States by the end of October 2016).

## REPORT TO THE STECF

## EXPERT WORKING GROUP ON EU MAP and template for National Work Plan (EWG-16-01)

Hamburg, Germany, 7-11 March 2016

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

## Introduction

The STECF EWG 16-01 meeting was held in Hamburg, Germany, from 7 to 11 March 2016, to critically assess a draft EU Multi-annual Programme (EU MAP) for Data Collection and to develop templates and formats for National Work Plans under the revised Data Collection Framework (DCF).

### 1.1 Terms of Reference for EWG-16-01

The aims of this EWG were the following:

1. To provide expertise on outstanding issues of the future EU Multi-annual programme
2. To provide expertise for the preparation of the National Work Plan template

## Part I: Preparation of future EU MAP

## Background

Following the agreement on the Basic Regulation on the Common Fisheries Policy (Reg. 1380/2013), which includes Article 25 laying out the key principles for Member States to collect biological, technical, environmental and socio-economic data, the Commission has prepared a proposal for a revision of the Data Collection Framework (Council regulation (EC) No. 199/2008), submitted in 2015. This will be followed by a Commission proposal for a revision of the EU Multiannual Programme for data collection. Discussions on the revision of the EU Multiannual Programme are ongoing and the key issues that need to be addressed have been identified and discussed to various extents in STECF expert working groups and other relevant fora. The latest forum where a draft EU MAP was presented was the Expert Group on Fisheries Data Collection, held on the 12th of February in Brussels.

## Tasks for the EWG

The EWG 16-01 was invited to critically assess if the basic principles of the DCF re-cast and the major recommendations by STECF have been taken account of in the draft EU MAP and to suggest amendments, where deemed necessary. The EWG 16-01 was provided with documents produced during consultation with involved parties. The contents of the EU MAP must be put in conjunction with the different parts of the National Work Plans, as discussed at the EWG 14-17. In addition, the EWG was requested to give advice about what should not be in the future EU MAP but still must be put into the Work Plans or, for voluntary collection, elsewhere (e.g. Guidance document).

## Part II: Preparation of National Work Plan Template

## Background

Under the EMFF, the MS Operational Programmes must be supplemented by a work plan for data collection (Reg. 508/2014, Article 21), which will replace the National Programme. This work plan will be submitted by Member States to COM for the first time on 31st October 2016 in a specified format (Article 4(4) of Regulation (EC) No 199/2008). The content of the work plan must be consistent with Article 4(2) of that Regulation, referring to multi-annual sampling plans, schemes for at sea monitoring, surveys and data use. In case a WP is submitted, the Commission may approve it by implementing act (Article 21). COM needs to provide Member States with a template for the work plan before the summer, to allow for sufficient time for preparation. In addition, there is a need to streamline existing reports on data collection, namely Operational Programmes and Annual Reports, and avoid duplication of information. The future EU MAP should also be considered. The STECF EWG 14-17 (Hamburg, 20-24 October 2014) carried out preliminary work on the basic elements of National Work Plans, reviewed in the STECF Plenary (PLEN 14-03, Brussels, 10-14 November 2014). The basic principles of the template were presented in the Expert Group on Fisheries Data Collection, held on the 12th of February in Brussels.

## Tasks for the EWG

The EWG 16-01 was invited to critically assess the draft National Work Plan template and guidelines as proposed by COM and improve it where necessary. The aim was to develop a template that is streamlined with existing templates and in line with the emerging EU MAP, as well as end user needs. Complementary documents were provided by experts, to further elaborate on the structure of the template, namely: description of possible links between the different tables of the template; an explanatory note justifying and explaining the inclusion/exclusion of tables in the Work plan template. The Commission provided experts with additional documents.

The focus of the exercise was on simplification, user-friendly formatting and standardisation. The EWG was asked to produce the draft guidelines and standard tables of the NWP to be assessed by the STECF plenary so then, any modification henceforth needed, can be dealt by in due time.

The European Commission provided the EWG 16-01 with a draft EU Multi-annual Programme (EU MAP) for Data Collection, based on a document that was first presented at the $1^{\text {st }}$ meeting of the newly established "Expert Group on Fisheries Data Collection" in Brussels, 12 February 2016, and revised after proposals for amendments by Member States until 19 February 2016. The EWG worked on the draft "Commission Decision adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors" (STECF EWG 16-01 Doc. 2), using the "track changes" mode for proposing amendments (see Annex 1), and provided explanations and comments on those changes in the following report sections.
In addition the EWG 16-01 was addressed by the European Commission through an explanatory note (STECF EWG 16-01 Doc. 3), laying out the legal background of the EU MAP and National Work Plans and listing a set of questions to the EWG with regard to the requested review of the provided documents and expert opinion on specific issues.
For the ToR on the EU MAP, the European Commission (Bas Drukker) gave a short presentation on the background and tasks for the EWG 16-01 with regard to the treatment of the documents provided and the expected outcomes.

The EWG set-up was to work in sub-groups, making the most efficient use of the expertise with regard to the ToRs:

- Sub-group 1: Biologists - Fisheries and stock sampling, by-catches
- Sub-group 2: Biologists - Recreational fisheries, eel \& salmon (anadromous \& catadromous species)
- Sub-group 3: Biologists - Research surveys-at-sea
- Sub-group 4: Economists and biologists - Fleet economics and transversal data, aquaculture and processing industry

The EWG 16-01 notes that the European Commission referred only to salmon and eel in the explanatory note. However, the draft EU MAP refers to 'anadromous and catadromous' species and then specifies eel, salmon and sea trout (but only in the Baltic area). The EC did not ask the EWG about sea trout, but the EWG consulted with Finnish experts on sea trout so that the EWG could also advise on sea trout in the Baltic region.

### 2.1 Biological sampling of fisheries and stocks

### 2.1.1 Introduction

Recitals: Concerning recommendations of STECF, the EWG 16-01 considers that the draft EU MAP does not fulfil those recommendations. For example, a recital reflecting the Commission Staff Working Document on the Commission Proposal for a revised DCF (SWD (2015)118 final, June 2015, section 5.1.1) should be included, as well as a recital reflecting the regionalisation approach.

In the view of the EWG 16-01, it is not apparent how the consultation that has taken place with the various RCMs, STECF, EWGs and other end-users has been used relating to variables covered by the draft EU MAP. The EWG also feels that reference to target levels within the draft EU MAP does not reflect the move towards probability-based sampling.

### 2.1.2 Chapter I-Definitions

All definitions already agreed and standardised within the text need to be aligned with a reference to the appropriate regulation or other source. Where this is not the case, the EU MAP should detail and define those additional items to ensure that specific aims of the legislation are met. Additional definitions have been added for consideration to promote understanding and consistency.

Consistency needs to be insured between the DCF recast and EU MAP in relation to research surveys. Currently the recast uses the term "research surveys", while EU MAP uses the term "research surveys at sea". It is proposed to change the wording in the DCF recast from "research surveys" to "research surveys at sea" to ensure consistency between the two legislation. [After the EWG, the addition of 'at-sea' was indeed included in the final draft of the recast DCF.] The DCF recast needs to have a definition of "research surveys at sea" included, this was originally in the EU MAP but is referred to in DCF:
"A voyage dedicated to the collection of data for scientific purposes, carried out by a vessel designated for this task." (STECF 13-12)
[The final draft of the recast DCF as published after the EWG doesn't contain a definition for research surveys at sea. Hence, the above proposed definition is to be included in EU MAP.]

The term "Index river" is new and requires a definition. The EWG 16-01 referred to that proposed by the ICES WKESDCF, but adjusted to apply to any anadromous and catadromous species, and noting that in some eel management units, the majority of eel production may be from lagoons, so the definition is extended to include these other environments where appropriate. The term Index River is well established in the management of salmon and sea trout, and therefore the EWG did not propose to change the term itself, but instead to extend the definition to include eel situations.
Definition of Fishing Platforms - the inclusion of fisheries in inland waters for anadromous and catadromous species, and for recreational sea angling, mean that fishing is no longer limited to registered vessels but now includes non-registered vessels, fixed installations and those fishers who stand in or near the water when fishing (including commercial and recreational fisheries). Therefore, the definition of a fishing platform should include non-registered vessels, fixed installations and 'on foot'.

### 2.1.3 Chapter II - Data requirements

## Biological sampling

The text provided relates to metier-based sampling and is not appropriate for probability-based sampling. The proposal is to move towards probability-based sampling, and EWG 16-01 has provided updated text for consideration with this aim in mind.
The previous version of EU MAP (presented to the "Expert Group on Fisheries Data Collection", Brussels, Feb. 2016) contained a complicated section referring to various statistical requirements for sampling schemes. This was unsatisfactory, but instead of reformulating the discussion into
more meaningful text, it has been removed entirely. The EWG 16-01 has provided updated text for consideration in the "track changes" document (Annex 1).
The data collection requirements for anadromous and catadromous species are substantially different from those for marine species because the biological data requirements are different from those of marine fisheries, in terms of what is collected, the frequency of collection, and that they can be collected from fishery-dependent and fishery-independent sources (defined above). Therefore, rather than insert exclusions or caveats throughout the marine data collection texts, a separate section in the text is proposed for anadromous and catadromous species, and these species are removed from Table 1A because they are listed in Table 2.

Although the principle of investigating the effects on the ecosystem should be extended to include the effects of anadromous and catadromous fisheries on the freshwater ecosystem, this would be a major change to the EU MAP and it is difficult to define the parameters to investigate. Therefore, the EWG 16-01 does not propose to extend this ecosystem effects requirement to freshwater at this time. It is proposed to include recruitment surveys and surveys for standing stocks for anadromous and catadromous species as a bullet point in data requirements and remove them from chapter III, as they do not constitute research surveys at sea, should not be included in the cost sharing agreements and should not fall under the obligation of mandatory survey lists.
The paragraph in chapter III on adaptation of national work plans to regionally coordinated sampling design and effort is proposed to be moved to chapter II, as this applies to all data collection programmes and not just to research surveys at sea.

Full biological data collection is not required for recreational fisheries, but the composition of the catch must be reported. For information on recreational fisheries, see section 3.4.

## Impacts on marine ecosystem

By-catch of non-target species: A sampling design optimised for the collection of fisheries data will not necessarily be optimal to provide adequate data to evaluate the impact of fisheries on any by-catch of protected, endangered or threatened species (PETS). The EWG 16-01 reiterates that the fact that the primary aim of the EU MAP relates to the sampling of ALL fisheries and although the EWG recognises the importance of collecting information relating to by-catch of non-target species, that this should not be at the expense of reducing the ability of MS to meet the core requirements of the legislation. The EWG 16-01 has provided updated text for consideration in the "track changes" document (Annex 1).
Deep-sea fisheries: Where RFMO data requirements exceed those of the DCF, they are detailed separately to, and in addition to, those that are detailed in the EU MAP. Any additional biological data requirements for deep-sea species should similarly be maintained separately to the EU MAP within the basic deep-sea regulation (currently Reg. 2347/2002).

## Modification of Tables 1A-1D and 2

The EWG 16-01 reviewed and updated the new table proposals and amended as follows:
Table 1A. Basic list of stocks in sea basins in EU waters for which biological variables further specified in the EU-MAP guidance document (frequency, sample size, age, weight, sex, maturity, fecundity, geographic stratification [former appendix I and II]) shall be collected:

- References to salmon, Eel and sea trout were removed as they were included in (Table 2 List of anadromous and catadromous species for which biological variables shall be collected also for the freshwater part of their lifecycle)
- Stock identities were changed to the new agreed areas for horse mackerel and red gurnard. It is the opinion of EWG 16-01 that this table will require updating on a regular basis in line with stock assessment needs by end users.


## Table 1B. List of Biological variables defined by stocks in sea basins of Outermost Regions of the Union:

- The sampling needs for French Guyana, Guadeloupe and Martinique, Reunion Island and Mayotte have been modified to reflect end-user requirements and maintain consistency with requirements detailed for RFMOs and SFPAs in Table 1C.

Table 1C. List of Biological variables defined by stocks in sea basins under RFMOs and SFPAs

- RFMO species lists were checked. It was the opinion of the EWG 16-01 that the table relating to FAO area 34 (CECAF) and coastal waters of FAO area 47 (Divisions 1.1 to 2.2) be split.
- A new table for FAO area 34 (CECAF) was produced using data from the RCM LDF 2015.
- No data was available to provide a comprehensive list for FAO area 47 (Divisions 1.1 to 2.2). The EWG 16-01 seeks clarification as to if a reference list for this area is required.
- Requirements relating to stocks covered by SPRFMO should be included under other RFMOs

Table 1D. List of species to be monitored because of species protection programmes in the EU or under international obligations (chapter II (1) (b) (i))

- This table appears to have been created from the modified Appendix VII and Appendix VII policy needs as provided to EWG 15-15.
- The proposed table as provided was not suitable for the intended purpose. The main problems with the fields being:
- Species type - some Crustaceans, Molluscs and Echinoderms were included within the section relating to Teleost fishes
- Scientific name - many were missing
- Geographical area - many were missing and those that were completed were confusing or did not match.
- International or EU obligation - many were missing. The field also contained items such as "National management plans" with no reference to MS this relates to. The group was of the opinion that National plans are not relevant under the current field heading. Many species appeared more than once and it is not clear if this duplication relates to area covered or applied legislation.
- The group proposes the headings to be changed as follows:
Common name $\quad$ Scientific name $\quad$ Region / RFMO $\quad$ Obligation type

Table 2. List of anadromous and catadromous species for which biological variables shall be collected

- The area where the Stock is located is adjusted for eel to include all areas outside of Eel Management Units, and for sea trout to include the Baltic Sea itself in addition to the inland waters that exit into the Baltic Sea.

Modification of tables 3 and 4:

## Table 3 [former Appendix IV] - Fishing activity (metier) by Region

The suggested amendments are the following:
The fishing metier excluded some fishing platforms for anadromous and catadromous species. Proposals are made for additional metier levels to account for these other platforms (glass eel fisheries, fixed installations (fences and weirs) and fishing `on foot').

## Table 4 - Species to be collected for recreational fisheries

The suggested amendments are the following:
The species column did not have "including in fresh water" for salmon, eels and sea trout in all appropriate areas, so this has been corrected. Salmon has been removed from the Mediterranean species cell because there are no salmon in the Mediterranean.

### 2.1.4 Chapter III - Research surveys at sea

The sequence is changed in agreements of work plans: The paragraph on agreement of survey contribution by country is moved above the paragraph on national work plans, as the regional agreements will inform/determine the national work plans. The contribution of Member States should not only be discussed but agreed at regional level, hence the wording was changed.
It is proposed to have surveys for anadromous and catadromous species moved from Chapter III to chapter II, see above for justification.

## Modification of Table 12 List of research surveys at sea:

In line with recommendations of EWG 15-15 (STECF report 16-01), the most updated tables to be included in the EU MAP are the lists provided by the RCM Med\&BS 2015 and outside this RCM region, the list compiled for EWG 13-05 (STECF report 13-12). Table 12 of the EU-MAP draft has been amended accordingly, also to align this list with RCM Med\&BS 2015 proposal, as some surveys were included accidentally (Bluefin Tuna Aerial Survey, Beam Trawl Survey in North Adriatic, Pelagic Juvenile Survey in the Black Sea were not to be included). Table 12 should not include the maximum number of days, as the total effort and distribution of effort by member states should be agreed at RCG level. See Annex I for the updated tables.

## Evaluation and updating the list of mandatory surveys

In line with proposals of e.g. STECF EWGs 13-05 and 15-15, as well as RCMs in 2015, and not to disrupt current well-established surveys, the EWG 16-01 agrees that the EU MAP shall contain a basic list of mandatory internationally coordinated surveys, however, this list shall be evaluated against updated eligibility criteria. Once this evaluation is completed, the list of mandatory surveys shall be updated. Also, this updated list shall form the basis for cost sharing between MS.
The evaluation of the surveys requires an independent review process based on predefined criteria in line with the criteria for the establishment of multi-annual Union programmes as
defined in the proposed DCF recast. The EWG 16-01 proposes the following roadmap for the evaluation procedure:

- April 2016: STECF to initiate the evaluation procedure
- End-users provide survey requirements based on data needs before September 2016 (ICES, GFCM, ICCAT)
- September 2016: All RCMs compile a list of surveys that shall be subject of the evaluation. This list encompasses the surveys currently included in the DCF as well as relevant international surveys contributing to the CFP goals. End-user input will be delivered through the RCMs.
- January 2017: Dedicated STECF EWG evaluating all surveys according to the predefined and updated ${ }^{1}$ (prior to this EWG, e.g. through ad-hoc contract) evaluation criteria. This EWG will then propose the list of mandatory surveys to be included in EU MAP. This group is preferably chaired by an external non-EU expert and the report is reviewed by external experts prior to presentation to STECF. The composition of the group shall be based on survey expertise, end-user input and statistical expertise (survey optimisation).
- April 2017: STECF to approve this list and initiate the process to update EU MAP
- 2017: Commission to update EU MAP
- 2017: RCGs to set up and finalize cost-sharing procedures
- 2018: MS to adhere to the updated list and to share costs based on procedures agreed by RCGs


### 2.1.5 Chapter IV - Thresholds

For biological sampling of commercial catches, thresholds for national work plans should be considered as interim measures only prior to the development and implementation of regional sampling plans through which regionally coordinated sampling and task-sharing would accommodate data collection requirements. As the EWG 16-01 considers them to be interim measures, it sees no reason why the proposed thresholds should differ from those in Commission Decision 2010/93/EU, and the emphasis should be directed more towards the development and implementation of regional sampling plans. An additional threshold was included to cover stocks with low TAC to ensure sampling would be in place until RCGs had set up agreed regional sampling plans at the stock level.
In relation to cost sharing for surveys, the $3 \%$ should apply to the EU share of the TAC. Paragraph clarified to apply cost sharing model of $3 \%$ EU TAC to regions where TACs are established and 3\% of EU landings in regions without TACs. Reference to methods for cost sharing in multispecies and ecosystem surveys has been removed, as these should be agreed at RCG level.

A separate section is proposed for anadromous and catadromous species, because the justifications for setting thresholds, or not, differ from those for marine fisheries.
The EWG 16-01 notes that the absence of a derogation/threshold for species with Recovery Plans in the old DCF was not present in the EU MAP. The EWG recommends that this is reinstated.

[^0]For eels, the Eel Regulation (EC 1100/2007) constitutes an international Recovery Plan and therefore the EWG 16-01 considers that it may be that no thresholds can apply for eel, but this remains to be clarified. The Eel Regulation requires MS to report on the state of their eel stock in all eel management units, regardless of whether there are eel fisheries or not. Therefore, it would be inconsistent to apply a threshold in the EU MAP for collection of fishery-independent data.

If thresholds are to apply to eel for fishery-dependent data, the EWG 16-01 noted that the EWG 14-02 proposed "Where fisheries exploiting European eel exist in Eel Management Units, and the catch exceeds 25 t of silver eel equivalents per year (as defined by ICES), abundance and distribution data shall be collected at least once in every Eel Management Plan reporting period (presently 3 years) in order to estimate fishing mortality rate." which differs from the DCF recast (Article 5.1.c) that states that Multi-annual programmes (NWP) shall define "thresholds below which Member States do not need to collect data ....for stocks without catch limits, on the basis of the relative share of a Member State in the total exploitation of the stock". The EWG 16-01 could not identify a scientific justification for selecting a threshold proportion of the catch, but if one is required, then suggests $0.1 \%$ as a starting point for further consideration.

No thresholds are proposed for salmon and sea trout, because the EWG 14-02 noted that all EU MS are required to report all Atlantic salmon catches to the North Atlantic Salmon Conservation Organisation (NASCO). The huge variation in stock sizes means that excluding small stocks would have a very uncertain and potentially misleading effect. However, not all biological data need to be collected annually - see EWG 14-02 report for guidance on spatial and temporal frequency of data collection.

### 2.1.6 RCG agreements

In order to gain legal security on RCG agreements, the EWG 16-01 proposes to include the following paragraph in the EU MAP:
"Member States should, were possible, reach agreements and make recommendations within the relevant Regional Coordination Groups (and PGECON). Where agreement cannot be reached, RCGs should inform the Commission of such a failure. The Commission may thereafter consult with the STECF on whether the recommendation merits inclusion in a revised legal instrument (e.g., Commission Decision) that obliges Member States to fulfil the particular activity."

### 2.2 Economic and transversal variables

### 2.2.1 Chapter I - Definitions

The EWG 16-01 suggests that the following definitions be deleted:

- Sampler/sampling staff: not used in the subsequent chapters of the EU MAP. Moreover, the current proposal of the revised DCF (Document 5417/2/16 Rev 2 of 8 March 2016) already includes the definition of "scientific observer"
- Soaking time: The EWG suggests the deletion of this variable from Table 5 (list of fishing activity variables). Soaking time has never been used by end-users and the information is not recorded in the logbooks. Therefore, there is no need to include this definition anymore.

The EWG 16-01 suggests the inclusion of the following definitions:

- Fleet segment: this concept is fundamental for the provision of economic data of the fleet. The proposed definition is the one approved by STECF EWG 13-05 (report STECF 13-12).
- Population of aquaculture enterprises: as suggested by the most recent DCF workshop on aquaculture (Gdynia, June 2015).
- Population of processing enterprises: as defined in the current EU MAP (Commission Decision 2010/93/EU).

The EWG 16-01 suggests to change the definition of "fishing days": The proposed definition is the one that resulted from the DCF workshop on transversal variables (Cyprus, February 2016). The justification is that the definition of a "fishing day" referring to passive gears cannot be followed in practice because the fishing time is currently not a mandatory field in logbooks, therefore the information on whether gears remain at sea or not is difficult to be collected.
The EWG also discussed the need to include the definition of "fishing trip". The definition is already reported in the Commission Implementing Regulation 404/2011 of the Control Regulation. However, the outcomes of the DCF workshop on transversal variables (Cyprus, February 2016) demonstrate that there are different interpretations of this variable and MS are adopting different approaches. Therefore, it would be beneficial if the EU MAP would contain a clear description on how this variable is derived.
The EWG 16-01 amended the definition of "population of vessels" according to EWGs 13-05 and 15-15.

The EWG 16-01 also discussed paragraph 2 ("Data collection methods shall be appropriate for the intended purposes defined in par. (1) and to inform end users of the quality of the data"). This sentence appears to be weak in terms of ensuring the application of internationally agreed methodologies and best practice. Previous STECF reports advised to include a reference to an EU MAP "Guidance Document". Considering that this proposal has not been included in the EU MAP, there is a need to inform MS to follow best practice and the methodological improvements of the last years (see for instance the work done within the PGECON on harmonization of methodologies and calculation of quality indicators or the work carried out by the DCF workshops on transversal data).

### 2.2.2 Chapter II - Data requirements

Point 3, activity data

| Present text | Amended text |
| :---: | :---: |
| 3. Detailed data on the activity of Union fishing | 3. Data to assess the activity of Union fishing |
| vessels in Union waters and outside Union waters | vessels in Union waters and outside Union waters |
| as reported under Regulation 1224/2009 must be | consist of the variables as indicted in Table 5 |
| made available to end-users as a supplement to | [former Appendix VIII]. Primary data as reported |
| biological and economic data. Variables to be | under Regulation 1224/2009 are to be made |
| made available are listed in Table 5 [former | available to the National Institutions implementing |
| Appendix VIII]. Estimates shall be made based on | the Working Plans. When data are not to be |
| representative samples where data are not to be | collected under Regulation 1224/2009 or when |
| collected under Regulation 1224/2009 as regards | data collected under Regulation 1224/2009 are |
| certain segments of the fleet, certain geographical | not appropriate for scientific use, they can be |
| areas or quantities of fish landed below a certain | collected using alternative statistical methods. |
| reshold, or where geographical areas are | These statistical methods should allow for the |
| insufficiently covered. These sampling | estimation of variables listed in Table 5 at the |
| programmes should allow for the estimation of | lowest relevant geographic level by fleet segment |
| such parameters at the lowest relevant | (table 6a) and metier level 6 (table 3) |

The amendment is justified by the following considerations:

- The section on activity data starts with a description of which data should be made available to end users. This is not appropriate because this section should list the sets of data to be collected. In addition, all types of detailed data have to be made available to users of scientific data (as defined in the EU MAP);
- There is a need to clearly state the obligation for Member States to allow the use of primary control data for the purpose of data collection;
- The list of cases where additional sampling could eventually be necessary is not exhaustive and it does not consider STECF advice. Therefore, the EWG 16-01 suggests to revise the text considering the issue of data that are not collected under the Control Regulation and the issue of low quality for scientific purposes. The EWG 16-01 recalls the EWG 15-15 statement: as described in the STECF report 13-12 (EWG 13-05), consideration shall be given to the data quality collected under the Control Regulation. If the data is not considered to be appropriate, the EU MAP shall facilitate the data collection up to the required level.

Point 4, Social and economic data of the fleet

| Present text | Amended text |
| :--- | :--- |
| 4. Social and economic data <br> on fisheries shall be collected to <br> enable the assessment of the <br> social and economic performance <br> of the Union fisheries sector. <br> They consist of: | 4. <br> enable the assessment of the social and economic performance of <br> the Union commercial fisheries sector. They consist of: |
| a) Economic variables as indicated in Table 6 [former Appendix VI]. |  |
| according to the sector segmentation of Table 6a [former Appendix |  |
| III] and according to the supraregions as defined in table 6b |  |

a) Economic variables as indicated in Table 6 [former Appendix VI].
b) Social variables as indicated in Table 7.
[former Appendix II]. 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. In addition, capital value, capital cost, investments and subsidies on investment have to be collected for inactive vessels. In cases where a fleet segment has less than 10 vessels, clustering may be necessary in order to design the sampling plan and to report economic variables. Economic data shall be collected on a annual basis.
b) Social variables as indicated in Table 7. Social data shall be collected every three years.

Detailed definitions and specification of methodologies may be compiled by the European coordination groups (PGECON?) in cooperation with end users and taking account of STECF reccomendations..

The amendment is justified by the following considerations:

- The population of vessels should be indicated as it informs MS that all the vessels in the fleet register should be covered; the definition is the one agreed by EWGs 13-05 and 1515.
- There is a need to clearly state that economic data have to be provided on an annual basis.
- The fleet segmentation is necessary to guarantee the consistency in time series and to define the minum level for the definition of the sampling scheme and for the provision of data (see also STECF EWGs 13-05 and 15-15).
- Economic data have to be provided by supra-region (see also STECF EWGs 13-05 and 1515).
- The possibility to cluster segments should be given in the EU MAP because it provides guidance on how to proceed when collecting and/or reporting might breach the confidentiality assurance and/or the statistical representativeness of a certain fleet segment due to a small amount of observations might be of concern.
The EWG 16-01 expressed some concerns regarding the calculation of investments for the inactive vessels and therefore considered it useful if STECF could eventually reconsider this provision.

Point 5, aquaculture

| Present text | Amended text |
| :--- | :--- |
| 5. Social and-economic data and sustainability <br> data on aquaculture to enable the assessment of <br> the social and-economic performance and the | 5. Social and economic data and sustainability <br> data on aquaculture shall be collected to enable <br> sustainability of the Union aquaculture sector, <br> including its environmental impact. They consist <br> of: |
| as Econsment of the social and-economic <br> performance and the sustainability of the Union <br> aquaculture sector, including its environmental <br> impact. They consist of: |  |
| [Appendix X] according to the sector | a) Economic variables as indicated in Table 8 <br> [Appendix X] according to the sector <br> segmentation of Table 9 [former Appendix XI]. |

segmentation of Table 9 [former Appendix XI].
b) Social variables as indicated in Table 7.
c) Sustainability data on aquaculture as indicated in Table 10.

The population is all enterprises whose primary activity is defined according to the Eurostat NACE codes 03.21 and 03.22 and who operate for profit. Economic data shall be collected on annual basis.
b) Social variables as indicated in Table 7. Social data shall be collected every three years
c) Sustainability data on aquaculture as indicated in Table 10
Detailed definitions and specification of methodologies may be compiled by the European coordination groups (?PGECON?) in cooperation with end users and taking account of STECF reccomendations.

Detailed information on implementation of aquaculture data collection shall be provided in work plans, taking into account data requirements specified in Reg. xx (RECAST)

The amendment is justified by the following considerations:

- Information on data collection timeframe should be provided in the EU MAP to ensure clarification and was respectively added to each type of variables except sustainability indicators.
- Applicable thresholds considering the use of simplified methodology for aquaculture data collection is provided in Chapter IV.
- The EWG was asked to review environmental indicators in Table 9 (medicines and mortalities). However, this issue has to be addressed to an appropriate group of experts. Extensive information on this issue is provided in the reports from the Workshop on Aquaculture Data Collection (Gdynia, June 2015), from JRC on aquaculture and from the ICES Working Group on Aquaculture (WGAQUA).

The EWG 16-01 also considered that the version of draft revised DCF as provided during the meeting amended the previous one regarding the obligation to collect socio-economic data and sustainability data for aquaculture. The EWG concluded that data requirements specified in the revised DCF should be considered by MS when drafting the work plan, but the content of the EU MAP should include data requirements disregarding if these data are mandatory or not.

Point 6, processing

| Present text | Amended text |
| :--- | :--- |
| 6. Social and economic data are needed to enable <br> the assessment of the social and -economic <br> performance of the Union fisheries processing <br> sector. They consist of: | 6. Social and economic data on fisheries <br> processing sector shall be collected to enable the <br> assessment of the social and -economic <br> performance of the Union fisheries processing |
| a) Economic variables as indicated in Table | sector. They consist of: |
| 11 [former Appendix XII] | Economic variables as indicated in Table |
| b) Social variables as indicated in Table 7.. | $11 \quad$ [former Appendix XII]according to the <br> segmentation specified within relevant European |


|  | expert groups (?PGECON?). The population is all enterprises whose main activity is defined according to the EUROSTAT definition under NACE Code 10.20. <br> Economic variables for main activity enterprises shall be collected on annual basis. Number of enterprises and turnover for non main activity enterprises shall be collected biennially. <br> Work plans shall clearly identify the variables and the part of the population covered through Regulation (EC) No 295/2008 concerning structural business statistics and the variables and the part of the population that have to be covered through additional data collection methods. <br> b) Social variables as indicated in Table 7. Social data shall be collected every three years. <br> Detailed definitions and specification of methodologies may be compiled by the European coordination groups (?PGECON?) in cooperation with end users and taking account of STECF reccomendations. |
| :---: | :---: |

The amendment is justified by the following considerations:

- Information on segmentation is necessary to define the minimum level for the definition of the sampling scheme. Considering that any segmentation is reported at the moment in the EU MAP, the EWG suggests not to prescribe any segmentation in the new EU MAP but to clearly state that this segmentation will be provided by PGECON.
- As was stated by EWG 15-15, the method of data collection should not be specified in the EU MAP, it has to describe the requirement and content of relevant data. Therefore, Table 11 should be kept with the entire list of variables, necessary to achieve the objectives set out in Article 25 of Regulation (EU) No 1380/2013.
- Data collection for economic and social variables of enterprises with non-main activity of fish processing should be limited only to the number of enterprises and turnover indicator and performed biennially, as in the current EU MAP.
- With regard to existing overlaps of economic variables between the legal frameworks of the DCF and SBS, MS should provide a comprehensive description of the data collection scheme in their Work Plans concerning variables defined in Table 11, with the aim to avoid duplication of data collection. The main differences between DCF and SBS data are reported in the STECF report 13-31 (EWG 13-15) and in the study on "Scientific data storage and transmission under the future Data Collection Framework Feasibility Study" released in Sep. 2014, Annex 1.1 "Comparison of legal requirements under the DCF and Statistical regulation concerning submission of data on aquaculture and fish processing".
- Raw material: The EWG $16-01$ notes that the processing industry is already obliged to provide the origin and species of fish raw materials [as well as fishing gear and combined nomenclature] on their products under Regulation (EU) 1379/2013 on the Common Organisation of the Markets (CMO). However, it is not clear whether these data are available in a form suitable for data collection. Based on this, and notwithstanding the pilot studies at MS level, the table for fish processing has been amended to recover the variable
of weight of raw material per species and origin as optional, in the terms of the mentioned regulation, as was already pointed out in the STECF report 13-12 (EWG 13-05). The EWG 16-01 commented that data on the origin of raw materials is key to establish the connection between the fleet and the processing industry. The end users have already shown their interest on the DCF processing sector data if it would be linked to the fleets. The data on the origin of the raw material, as requested by the CMO, would contribute to analysing the importance of key stocks (economically), as for example tuna from the Atlantic, Mediterranean or Pacific; highlight the impact of the landings of EU fleets on EU regional economies or contribute to the knowledge of the sustainability of the processing sector.


### 2.2.3 Chapter IV - Thresholds

$\left.\begin{array}{|l|l|}\hline \text { Present text } & \text { Amended text } \\ \hline \begin{array}{l}\text { 10. With regard to social and economic } \\ \text { aquaculture data, Member States may define a } \\ \text { simplified methodology in their work plan if the } \\ \text { total aquaculture production volume and value, as } \\ \text { reported in the Member States' latest submission }\end{array} & \begin{array}{l}10 . \quad \text { With regard to social and economic } \\ \text { ander Regulation (EC) No 762/2008, are both less } \\ \text { simplified methodology in their work plan if the } \\ \text { total aquaculture production volume and value, as } \\ \text { reported in the Member States' latest submission } \\ \text { under Regulation (EC) No 762/2008, are both less }\end{array} \\ \text { than 1\% of the total EU aquaculture production } \\ \text { volume and value. The EU aquaculture production } \\ \text { volume and value shall be the most recent data } \\ \text { published by Eurostat. In this case, no socio- } \\ \text { volume and value. Alternative methods may also } \\ \text { be developped for enterprises whose activities are } \\ \text { economic aquaculture data need to be provided } \\ \text { on the production of species which account for }\end{array}\right)$

## Justification:

The EWG 16-01 agrees with the general approach used to define this threshold. The EWG is also aware that the present draft of the revised DCF does not consider the collection of socio-economic data for the aquaculture as mandatory. However, the EWG considers to maintain this threshold, but suggests to delete the explanation of the meaning of the simplified methodology that should be applied by MS in case the threshold is applied. This is not clear in the present text and it is much more related to methodological issues that could be addressed by PGECON.

### 2.2.4 Modification of tables related to transversal and economic data

Table 5 [former Appendix VIII] - List of fishing activity variables

The suggested amendments are the following:

- Remove "number of vessels" under the section on effort. This variable is already listed in the section on capacity.
- Delete "number of rigs" and "soaking time". These variables, although requested in the DG MARE/STECF data call for the Annual Economic Report, had never been used. The removal of such variables has been recommended by the DCF workshop on transversal variables (Cyprus, February 2016), since these are variables not consistently collected through the logbooks and Control Regulation.
- The variable "hours fished" is to be considered as optional because this information is optional in the Control Regulation and therefore it could be difficult to be estimated. This is coherent with what was suggested by the DCF workshop on transversal data (Cyprus, Feb. 2016).
- Add a footnote specifying the minimum level of disaggregation.
- For the variables (i) Number of nets/Length, (ii) Number of hooks/Number of lines, (iii) Numbers of pots/traps, the EWG 16-01 suggests to include a footnote to state that the need of these additional variables has to be decided regionally, as these decisions require a regional approach associated with core end-user needs.
- Delete the variable "conversion factors", according to EWG 15-15.
- Changes are required to ensure that variables are appropriate for anadromous and catadromous species, and that exceptions are possible for those variables that are not relevant to anadromous and catadromous species, but these changes have not been made.


## Table 6 [former Appendix VI] - List of Economic variables for the fleet

The suggested amendments are the following:

- Delete "fuel subsidies" and "financial results" as recommended by EWG 15-15.
- Delete footnotes because the related information is reported in the text and because the reference to the guidance document is no more valid.

The EWG 16-01 suggests to include two additional tables that are referred to in the text:

- Table 6a - Fleet segmentation by Region. The content of this table is the one proposed by STECF EWG 15-15 with the inclusion of the vessel length categories;
- Table 6b-Geographical stratification by Region. The content of this table is the one proposed by STECF EWGs 14-18 and 15-15.
A fleet segment can be further divided when there is a need to differentiate an existing segment to distinguish fleets operating in the outermost regions or exclusively outside Union waters (see STECF EWGs $15-15$ and 14-18) or to distinguish low activity level vessels as suggested by the Workshop on Thresholds (The Hague, Oct. 2014).


## Table 7 - Social variables on the fleet, aquaculture and processing factors

Changes are required to ensure that variables are appropriate for anadromous and catadromous species, and that exceptions are possible for those variables that are not relevant to anadromous and catadromous species, but these changes have not been made.

## Table 8 [former Appendix X] - Economic variables for the aquaculture sector

The suggested amendments are the following:

- "Gross value of sales per species" to replace "Gross transactions return" which was left in the table notwithstanding with STECF EWG 15-15 recommendation to use a proper naming for income variable.
- To avoid duplication, the economic variable "Number of persons employed" was replaced with "Number of employees" considering that former variable defines also unpaid labour which is separately presented in Table 8.
- Changes may be required to ensure that variables are appropriate for anadromous and catadromous species, and that exceptions are possible for those variables that are not relevant to anadromous and catadromous species, but these changes have not been made.


## Table 10 [former Appendix XI] - Segmentation to be applied for the collection of aquaculture data

The suggested amendments are the following:

- The aquaculture method "cages" was missing disregarding the STECF EWG 15-15 recommendation that proposed to include this variable and was not in line with methods, defined in Regulation 762/2008.
- Variable "Eggs for human consumption" was replaced according to the STECF EWG 15-15 recommendation and moved to the section defining species/product.
- "Polyculture" in the section defining species was renamed to "multispecies" due to the duplication of definition from the method section.
- Variables from the species section were re-arranged according to the similarity of species.


## Table 11 [former Appendix XII] - List of economic and social variables for the processing industry sector

As was stated in EWG 15-15, the method of data collection should not be specified in the EU MAP, it has to describe the requirement and content of relevant data. Therefore, Table 11 should be kept with the entire list of variables, necessary to achieve the objectives set out in Article 25 of Regulation (EU) No 1380/2013. The title of the table has been changed accordingly.

The variable "weight of raw materials" is included in the table as optional according to STECF EWG 13-05.

For this ToR, the EWG 16-01 was provided by the European Commission with a draft "Commission Implementing Decision laying down rules on procedures, format and timetables for the submission of work plans for data collection" (STECF EWG 16-01 Doc. 4), explanatory notes on the legal background and questions addressed to the EWG (STECF EWG 16-01 Doc. 3) and the outcome of two ad-hoc contracts, preparing draft tables and explanatory notes on changes suggested regarding the WP tables (STECF EWG 16-01 Doc. 5 on economic data; STECF EWG 1601 Doc. 6 on biological data).

These documents were presented to the EWG 16-01 at the beginning of the work on this ToR by the European Commission (Venetia Kostopoulou) and the two ad-hoc experts (Irina Davidjuka, Paolo Carpentieri).

The prepared documents and the information from the presentations formed the basis for the work in the EWG 16-01 sub-groups, following the same allocation of expertise as done for ToR Part I (EU-MAP, see beginning of section 2 ).

The task for the EWG 16-01 was to critically assess the draft National Work Plan template and guidelines as proposed by the COM (STECF EWG 16-01 Doc. 4) and improve it where necessary. The aim was to develop a template and simplify structure that is streamlined with existing templates and in line with the new EU MAP, as well as end user needs.
The EWG faced the difficulty to work with preliminary versions of the documents (DCF re-cast, EU MAP draft) guiding the work on the templates for National Work Plans. Those documents are currently under revision on various levels. During the meeting, a new version of the revised DCF, used for discussions on the Council level, was provided to the EWG. Furthermore, it was not clear for the EWG from the beginning, what the legal structure of Work Plans is and how this relates to the other legislative acts for the revised DCF. The Commission clarified questions of the EWG on the set-up and relationships of the various legal acts during the first day the EWG was dealing with this ToR.

Due to time constraints, the EWG 16-01 was asked by the Commission to focus on the WP tables and some basic ideas and instructions for MS to follow when completing the tables and describing their planned work in the WP text. The amendments proposed by the EWG are included in the "track changes" version of the WP template document (Annex 2).

In general, while doing justice to the vast amount of work planned in the workplans, the text should aim for condensed text addressing the planned work without being extensively descriptive. Also, to facilitate and ease the evaluation procedures, guidance should be given to the content of the text in different paragraphs. To accommodate this, text boxes with a fixed number of words can be used to constrain the authors to the format and condense the text. Examples for these textboxes are included in section 3.5.

### 3.1 General sections

The EWG 16-01 suggests keeping the table "National Organisation" and to include a clarification about national organisation and coordination of data collection in the new WP structure. The information about responsibilities and contact persons could be useful for the $\mathrm{MS}^{\prime}$ internal management.

The EWG suggests including a table "Data availability", where the name of the data sets and timing when the final data will be available are provided.

The main issues and changes for the new WP modules are included in the following table:

| Table Modules <br> NP/WP | Comments | Status |
| :--- | :--- | :--- |
| Table National <br> Organisation | $-\quad$ The column "WP module" is included <br> $-\quad$ Information in columns: Acronym, Postal Address, e- <br> mail, Telephone could be optional. | Should be kept for <br> WP templates |
| Table 20. Data <br> availability | $-\quad$ "WP date of submission" could be automated. | New table should be <br> included in WP <br> templates |
| Table 23. Bi- and <br> multilateral <br> agreements | No comments | Should be kept for <br> WP templates |
| Table 21. Planned <br> and achieved regional <br> and international co- <br> ordination | Information about international coordination meetings and <br> workshops could be pre-filled by the Commission. MS <br> should mark only relevant meetings in the column "MS <br> Participation". | Should be kept for <br> WP templates |
| Table 22. Follow-up <br> of recommendations <br> and agreements | No comments | Should be kept for <br> WP templates |

### 3.2 Sampling of marine fisheries

Considerable changes are envisaged in the WP templates for the sampling of fisheries, prompted by 1) the move to probability-based sampling methods and, 2) the introduction of regional sampling plans. As with the other WP sections, guidance consideration has been given to make the NP template more relevant for evaluation and statistical analysis, to simplify the tables, and where possible to look to the potential to automate table production with standard software and data formats.
Two new tables (Tables 1 and 2) will detail the size and activity of the national fleets and the characteristics of the landings into Member States, the number, tonnages and number of locations. These tables substitute the former "Table III.A.1-General description of the fishing sector" which described the fisheries in a very basic way. The new tables show a more complete description of fisheries sector (gears, targeted species, number of vessels, effort, landed tonnage) and they are a means of quantifying the populations for which sampling plans pertain. They are also a means of assessing the coverage of the sampling set out in the WPs.

Table 6 is the new sampling plan description that has been adapted to reflect the new stratified sampling schemes envisaged with regional designs and probability-based sampling. Each Member State will detail all the sampling schemes which it will be operating (some of which may be regional, some national). For each scheme, all strata will be listed, the primary sampling unit (PSU) defined, and an estimate of the total number of PSUs available over the year given. Set against this will be the planned number of PSUs the Member State is intending to undertake. The

PSU will in most cases be trips on vessels for at-sea schemes and visits to ports, markets or processors on specific days, for on-shore schemes. Assessment of the Annual Report will, in part, be based on a comparison of the planned and achieved number of PSUs undertaken.

Table 7 is a sampling frame description table that provides more details on the strata and sampling frame of each scheme. This table links with Table 6 (having the same number of rows and a unique strata ID number), and with a new table relating to the quality assurance framework.

The sampling plan table and the sampling frame description will be linked (having the same number of rows and a unique strata ID number), to a table that details the achieved sampling (Table 8), which will provide a further breakdown of numbers or primary and lower sampling units, such as vessel locations, individual fish etc.

Table 9 is a table to be used only for the Annual Report. It would relate to the sampling schemes and strata, and list by "domain" (e.g. species/stock and metier) the number of achieved samples.
Table 10 is a table to be used only for the Annual Report and delivers information on the recording of incidental catch of vulnerable species such as marine mammals, seabirds and reptiles.

### 3.2.1 Modification of tables related to sampling of marine fisheries

The main issues and changes for the WP modules are included in the following table:

| Table Modules NP/WP | Comments | Status |
| :---: | :---: | :---: |
| Table 1. Description of the flag fleets | This is a new table that, for each Member State, quantifies the size and activity of the national flag fleets, broken down by segments. <br> It records the number of vessels in the fleet, the number of trips made, and the landed tonnages at home ports and abroad. <br> The reference years would be used to plan the sampling, the same columns would record the actual activity in of the fleet components for the year of the Annual Report. | New table for WP |
| Table 2. Description of the landing locations | This is a new table detailing the landed tonnages and landing locations for the Member State. <br> It details the number of landing locations, the number of registered landings, the landed tonnages, and the proportion from own-flag and foreign-flag vessels. <br> The reference years would be used to identify trends in individual species landings at a national and regional level to ensure coverage of any species-specific sampling needs not previously covered by MS work plans at the | New table for WP |


|  | national and regional level where the species <br> composition of the landings change. |  |
| :--- | :--- | :--- |
| Table 6. Sampling <br> Plan Description | -A table to detail by schemes and strata, the <br> potentially available primary sampling units <br> (PSU), and the planned number to be <br> undertaken. | Considerable <br> changes |
| Table 7. Sampling <br> frame description | -A table detailing all the schemes and strata of <br> the national programme, linking to the planned <br> sampling and the QAF tables | Considerable <br> changes |
| Table 8. Achieved <br> sampling <br> (only for the AR) | -A table providing for all schemes and strata a <br> more quantified breakdown of the achieved <br> numbers of lower sampling units. | Considerable <br> changes |
| Table 9. Achieved <br> length sampling of <br> catches, landings <br> and discards by <br> species (only for the <br> AR) | - This table is related to the sampling schemes <br> and strata (by ID number), and it lists the <br> number of achieved samples by "domain" (e.g. <br> species/stock and metier) | Minor changes |
| Table 10. Incidental <br> catch of vulnerable <br> species (marine <br> mammals, seabirds, <br> reptiles, etc.) (only <br> for the AR) | - Table detailing the recording of incidental catch | New table for AR |

## Table 3. List of required stocks

The collection of data (and subsequent data reporting) should always be done at level of area/stock (i.e. ICES rectangles, GSA etc.), as the management/assessment is done at this level.

A column with the reference years has been added. It is assumed that three preceding years shall serve as a reference period (i.e. 2013-2015 for sampling planned in 2017).

In the column "Area/Stock", MS should list all stocks fished by vessels under its flag that are subject to assessment and/or management in the respective EU Region.
Instead of using colours (grey and white), a column specifying if the species (i.e. stock) has been selected for sampling, has been added.

The average landing in the references years, the share (\%) in the EU TAC (where applicable) or the share (\%) in EU landings (calculated at regional level) for MS should be given in the relevant
columns. Clarification is needed on how to obtain data on all EU landings at regional level for particular stock (where to get reliable/final data from?).
The second last column should only be added for the Annual Report and should contain the total landings of that species (stock) during the sampling year.

Table 4. Long-term planning of sampling for biological variables
This table is used to indicate the long-term plans for sampling various biological variables in the WP and shall serve as a reference table for cross-checking if data collected in the sampling year is in line with the long-term plan in the Annual Report.

The collection of data should always be planned at the level of area/stock (i.e. ICES rectangles, GSA etc.).

## Table 5. Sampling intensity for biological variables

This table shall only be used in Annual Report (not in the WP).
The number of achieved individuals should be requested for each variable (length, sex, weight, age, maturity and fecundity) at the level of species and area/stock and should coincide with the long-term planning in Table 4 In this way, these two tables could be cross-checked.

The main issues and changes for the WP modules are included in the following table:

| Table Modules <br> NP/WP | Comments | Status |
| :--- | :--- | :--- |
| Table 3. List of <br> required stocks | - | Minor changes |
| Table 4. Long-term <br> planning of sampling <br> for biological <br> variables | - Details the recording of biological parameters | Minor changes (?) |
| Table 5. Sampling <br> intensity of <br> biological variables | - | No changes (?) |

These tables have been retained from the previous WP template, however, it should be noted that the requirements for the collection of biological variables should be related to end-user needs.

### 3.3 Sampling of anadromous and catadromous species

Two new tables are suggested by the EWG 16-01 to address reporting needs for anadromous and catadromous species (Tables 12a and 12b). Column Unit: fill the unit (e.g. number of samples, sites, etc.) chosen by MS.

### 3.4 Recreational fisheries

Recreational fisheries are defined in the context of the EU MAP as non-commercial fishing activities exploiting living aquatic resources. Recreational fisheries can have significant impact on stocks (e.g. seabass, Baltic cod), but traditionally have been excluded from stock assessments, which may impact on the ability to sustainably manage stocks at MSY. The main drivers for the collection of recreational fishery data are: providing advice on fishing opportunities, designing and evaluating management measures for recreational fisheries, developing fishery management plans and strategies, and supporting the development of marine spatial planning (ICES Advice, 21 August 2015). The first three of these are the focus for the proposed data collection under the EU MAP as they relate to the CFP. This section covers recreational sea fishing, as the proposal for recreational data collection for diadromous species is defined in Section 3.3.
The collection of data on recreational fishing can be challenging as fishers use different methods (e.g. angling, nets, pots, traps, spears), fish from different platforms (e.g. shore, boats), often patchily distributed both in space and time, and can fish in remote areas. In many countries, there is no licencing of recreational sea fishing, so the is no list frame for surveys. To collect data on recreational fisheries for use in stock assessment, estimates are needed over time of effort (e.g. numbers of fishers, boats, trips, locations), catch per unit effort (CPUE) from a representative sample (e.g. fishers, boats, trips, sites), and information on the composition of the catch (e.g. weights, lengths) for both the kept and released component of the catch. Releases are particularly important as they can make up a very high proportion of the total catch (Ferter et al. 2013) and there is little information post-release mortality of many species in Europe with the exception of cod (Ferter et al. 2015a, 2015b, 2015c, Weltersbach 2013). Good survey design is very important in achieving robust estimates of recreational catches, as many biases can easily be incorporated (e.g. avidity, recall, coverage, non-response, rounding). Despite the challenges, there is significant expertise within the ICES Working Group on Recreational Fisheries Surveys (WGRFS) that can provide: advice on survey design; descriptions of how to design surveys; and a Quality Assessment Tool (QAT) to assess the robustness of the recreational fishing surveys (see ICES 2010, 2011, 2012, 2013, 2014, 2015). Despite the DCF requirements to collect data on recreational fisheries, data are still sparse and of variable quality across Europe, so little is known about the overall impact of recreational fisheries with a few notable exceptions (e.g. Baltic cod).
The requirements for the collection of recreational fisheries under the EU MAP relate to the data needed to deliver the CFP. Two additional constraints were added by the European Commission for recreational fisheries: 1. a list of species must be defined; and 2. a threshold must be included below which no data would be collected. Whilst the EWG 16-01 felt that the species should be defined regionally based on end-user requirements and that a threshold could not be justified scientifically, the constraints were accepted and EWG suggestions delivered on this basis. The existing requirements under the DCF (Council Regulation (EC) No. 199/2008) require recreational catch estimates of Atlantic salmon, European eel, European seabass, Atlantic cod, sharks, and Atlantic Bluefin tuna on a quarterly basis. On top of this, the EU Control Regulation (Council Regulation (EC) No. 1224/2009) also requires the reporting of recreational catches of depleted stocks that are subject to EU recovery plans. The rationale behind the definition of the data requirements for recreational fisheries under the EU MAP in the context of DCF requirements and EC constraints is described in detail below, but without prejudice to provisions on sampling of recreational fisheries set out in the Control Regulation.

The EWG suggests including pilot and annual surveys, and reporting both catches and releases and catch composition. Whilst minimum sets of species and thresholds are defined, the final data requirements should be defined regionally based on the outcomes of pilot studies and management need. The minimum data collection requirements are as follows:

- Multispecies pilot studies of recreational fisheries catch and releases conducted regularly (every 5 years) including assessed stocks, protected species, and other relevant species defined regionally.
- Annual surveys of volume (number, weight and composition) of catches and releases of recreational fisheries for a minimum set of species (see below) or identified by pilot studies and management need.

Pilot studies have been included to identify the impact of recreational fishing on overall stocks. For many species, no data exist or, where data exist, are not compiled at a European level, so the impact of recreational fishing is not known. The pilot studies are designed to deliver data that will assess the impact across a broad range of relevant species and identify key additional species where data should be collected on an annual basis. Pilot studies need to be repeated regularly as recreational catches can change markedly in short periods due to declining stocks or increasing recreational fishing, and recreational impacts may become more or less important. A 5-year period has been suggested based on the fact that Baltic cod catches can change markedly over a short timescale especially if local abundance increases.
Time series of recreational fishing data is needed for use in stock assessment. Hence, annual surveys for specific species have been defined, but with the potential to add more species based on regional management need. These surveys need to report not just total weight of catches and releases, but must include some information on composition of the catch (length or weight frequencies). The composition is likely to be very different to commercial catch composition and recreational catches cannot be included in stock assessment without this. However, full biological data collection is not needed for recreational fisheries as many biological parameters are likely to be the same so commercial data can be used (e.g. age-length keys, length-weight relationships).
Key assessed species where recreational fisheries are known to have an impact were defined as a minimum list for recreational data collection. There is the option to include more species based on local management need, but this would be done on a case-by-case basis at a regional level. The original list was defined based on the DCF and discussions within DG MARE. Changes to the lists were made relating to abundance and relevant to management need (e.g. stock that have assessments). The definition of sharks in the DCF has been changed to elasmobranchs to reflect the correct terminology and clarification from the EC on the meaning on sharks under the DCF. At present, there are still questions about whether a number of species should be in the list including: Baltic flounder (minimal impact), Baltic elasmobranchs (not present), Mediterranean seabass (minimal impact) and Mediterranean seabream (species identification). The species list is now reasonably well defined for the Baltic Sea, North Sea, Eastern Artic and North Atlantic, but still needs to be defined for the Mediterranean and Black Seas. Species lists needs to be agreed with local experts and the EC before finalising.
The EC stipulated that a threshold should be included below which no recreational fishery data will be collected for individual species. This is inconsistent across the EU MAP as no commercial metier has a threshold for reporting landings. There is no scientific basis for a threshold for collection of recreational catches, as the importance of recreational fishing will depend not just on species, but also on status of the stock. Hence, an arbitrary threshold has to be imposed. Initial proposals suggested that the threshold should be based on data, but where data did not exist, then the numbers of fishing licences or fishing vessels could be used as a proxy. However, this did not make sense as many countries do not have a fishing licence and neither numbers of
licences or vessels is likely to be closely related to catch. Thresholds should ideally be based on the proportion of fishing mortality caused by recreational fishing, but this was not possible as this is extracted from stock assessments and subject to many modelling assumptions. Thresholds based on landings were also considered, but rejected as this would exclude the released component of the recreational fishery and not take into account management measures like bag limits that reduce recreational catches (e.g. seabass). Finally, thresholds that relate recreational harvests and dead releases to commercial catch and discards were rejected due to the large uncertainty in estimates of commercial discards. In the end, an arbitrary threshold was defined where data show that the total recreational catches (harvest and releases) represent more than $5 \%$ of the combined commercial landings and recreational catches for any stock. However, the appropriateness of this threshold should be evaluated regionally and by the STECF, especially where recreational catch is reduced due to high voluntary or mandatory release rates or where there is high or unknown post-release mortality. If multispecies surveys are done as proposed, then surveys will be needed when a single species exceeds the threshold.
In many cases, multispecies surveys are already done or could easily be implemented with little additional cost, so should be considered as the best option for recreational surveys. This would ensure consistent design of surveys and provide a dataset that could be used for assessment of new stocks as the time series catch data needed would exist. This would increase the robustness of the recreational data collection programme significantly and increase the utility for end-users with minimal additional cost. Where multispecies surveys are already being done, the EU should collect data from the whole survey rather than just the minimum species list. In addition, there is need for a data call in across all species at a European level for recreational fisheries, not just the species covered under the DCF, in order to assess current impact of recreational fisheries, that should be led by the ICES WGRFS.
The Commission Implementing Decision on the Work Plans was derived using the same arguments as the Commission Decision on the EU MAP. No further information is included in the implementing decision apart from the reporting templates. Table 11 was created for Member States to include key aspects of their proposed survey for STECF approval (white columns) and STECF to assess if the Member State had delivered the survey as described (grey columns). The information included in Table 11 relates to location (MS, year, region, regional fisheries management organisation), species (name, if sampling is required), catch estimates (catch, release, composition), and survey methods. Obviously far more information about the survey is needed to assess the robustness of the methods and quality of the data produced. Hence, further information should be provided for assessment by STECF, RCGs and ICES. The requirements for further information are no different to what is required from a commercial perspective. As a result, recreational fishing surveys should follow the description for the commercial fisheries surveys outlining the periodicity (Chapter 3), survey design (Chapter 4) and the quality assurance and quality control (Chapter 5). Data should be made available to end users (Chapter 6) and regional cooperation should be utilised where appropriate (Chapter 7).

As guidance for filling in Table 11, the following points are suggested:

- All the species listed in the EU MAP Table 4 of the recreational fishery (by region) should be reported here, even if the species are not present in the country
- MS should indicate whether it has planned an estimation of the annual catch weight and rate of released fish, and eventually to report them in the AR.
- A column requests the reason for not sampling a certain species (e.g. species not present in the area, regulations/laws in the country, fit the requested threshold, etc.)
- The column "Type of survey" to indicate which methods will be implemented by MS to estimate catch, and release (e.g. phone survey, questionnaire, on-site interviews, etc.)
- Two columns (one for the WP and the other for the AR) to indicate if MS has planned and thereafter achieved the collection of biological variables.


### 3.5 Surveys

Regarding surveys, the draft tables for the work plan were adapted as well as the survey elements in the draft text. The changes were made having the work plan as well as future reporting and evaluation in mind.

Note: For internationally coordinated surveys, the information contained in the National Work Plan should contain only the contribution of the MS to the survey.
The proposed Table 18a was adapted to have more focus on the survey planning and the actual achieved performance of the survey. These changes highlight survey planning and the regional cooperation while allowing for national surveys to be included for reporting as well. Only the sampling activities related to the collection of core variables should be included in this table. For mandatory surveys, core variables are those agreed in the relevant international group in charge of planning the survey and included in the survey manual. For non-mandatory surveys, core variables are those determining the design of the survey, as determined by the national or international body in charge of planning the survey. Quantitative targets need to be set for the activities related to core variables included in this table.

To cater for more detailed reporting on the actual data collected, Table 18b was introduced. This table lists all core variables collected during the survey and the respective data dissemination and use in advice. Moreover, additional data collection can be reported here to highlight other data collection programmes benefiting from the survey. E.g. in case the survey is opportunistically used as platform for data collection on cetaceans, birds or other additional data collection apart from the prescribed collection under the respective survey handbook.

As guidance for the WP text, the EWG 16-01 proposes to use the following text boxes:

1. Name and acronym of the Survey.

* For mandatory surveys, use the same name and the acronym included in the EU-MAP Table 12 ()

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2. Period of the year covered
* For mandatory surveys, use the same period of the year included in the EU-MAP Table 12
(max. 15 words)
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3. Areas covered

* For mandatory surveys, use the same areas included in the EU-MAP Table 12
(max. 15 words)

4. Objectives of the survey
(max. 100 words)
5. Description of the methods used in the survey. For mandatory surveys, link to the manuals agreed in the relevant international group in charge of planning the survey
(max. 100 words)
6. For internationally coordinated surveys, describe the participating nations/vessels and the relevant international group in charge of planning the survey
(max. 50 words)
7. Where applicable, describe the international task sharing (physical and/or financial) and the cost sharing agreement used
(max. 50 words)

### 3.6 Economic and transversal variables

The draft National Work Plan provided by the COM was revised by the EWG 16-01 and draft WP standard tables were produced. The text from the previous National Programme guidelines was integrated into the new WP structure.
The EWG 16-01 recommends that the definitions for the economic variables, methodological aspects and clustering schemes should be provided in the Methodological Guidance and removed from the WP templates. MS should apply common definitions and methodology. If a MS has a deviation from the Methodological Guidelines, a justification and any requested derogation or non-conformity with the requirements of the EU MAP should be provided in the text. When relevant, this justification should be based on scientific evidence. However, MS should note that under the EU MAP, there are no provisions for the exclusion of any part of the population from data collection (by means of thresholds, e.g. fishing effort, quantities landed, revenues, etc.).
The EWG 16-01 suggests to change the name of the tables due to the changes in the EU MAP structure as well as to delete some tables from the WP templates
To take into consideration the social variables, two options could be considered: 1) add a new table or 2) include the social variables in table 15 (fleet), 16b (aquaculture) and 17 (processing). The draft Decision for WP template should be adjusted accordingly.

For the qualitative tables, drop-down menus (custom lists) could be applied for filling in information. The menus could allow choosing parameters referring to the EU MAP.
The field "WP date of submission" could be automated for all Excel tables and linked with the current WP date for the WP version control.
The column "Variable" in the Excel tables for fleet economics, aquaculture and fish processing should include a full list of economic or transversal variables provided in the EU MAP. In cases when for some variables data collection has not been implemented, the column "Planned sample rate" should be filled in with "NO". The EWG 16-01 suggests keeping the column "Planned Sample rate" as flexible part for the WP. The planned sample can be modified based on updated information on the total population.

The EWG suggests providing all necessary information about economic data collection in one table for fishery, aquaculture and fish processing and deleting the following previous NP tables: II.B.3Economic Data collection strategy; III.B. 2 - Economic Clustering of fleet segments; IV.A. 3 Sampling strategy - Aquaculture sector; IV.B. 2 - Sampling strategy - Processing industry.
The clustered and non-clustered segments should be provided in the columns "Fishing technique" and "Length class" for the table "Fleet economic data collection". The segments clustered with other segment(s) for sampling purposes should be marked with an asterisk. Information about clustering and detailed clarifications should be provided in the WP text. The clustering schemes should be provided by Methodological Guidelines.

Information about active and inactive vessels should be included in the table "Fleet Economic". The Planned Sample rate (\%) should be based on the official fleet population in the Fleet Register on the $31^{\text {st }}$ of December and any active vessel fishing at least one day during the year.
The previous NP table "Transversal Variables Data collection strategy" was changed into the new table "Fishing Activity Variables Data collection strategy". The new table provides a link between economic and biological modules through the new included columns: Supra-region; Fleet segment; Metiers (level 6). The data sources, either Control Regulation or complementary data collection, should be clearly stated for each variable group or variable in the case different sources should be used within a specific variable group. For each of these data sources, the planned coverage percentage, estimated on the basis of fishing trips, should be provided as quality assurance and quality control framework indicators. MS should describe the methodologies used: to cross-validate the different sources of data, to estimate the value of landings, the average price (it is recommended to use weighted averages, trip by trip) and to collect the complementary data (sample plan methodology, type of data collected, frequency of collection, etc.).
MS should describe the methodology followed to derive final estimates, whether it is in line with guidance/best practice across the EU or if a specific approach is being used. MS may provide detailed calculation procedures, including statistical ones, in an annex. MS shall describe specific actions for fleet segments, geographical areas and/or fish quantities landed not covered under the Control Regulation. MS shall provide estimates based on representative samples at the lowest relevant geographical level.
The EWG 16-01 draws attention to the table "Aquaculture activities" which should be changed according to the final version of that table in the EU MAP. The table is linked to the table "Population segments for collection of aquaculture data" through the columns "Techniques" and "Species group".

For the Aquaculture and Fish processing data collection, the MS should specify if data are collected under Structural Business Statistics (SBS, Reg. 295/2008). The data quality requirements have not to be addressed for data that are collected under SBS.
In order to provide a brief clarification in text boxes on the contents expected in the tables, some chapters from the previous NP guidelines were restructured and integrated under each table in the draft WP Decision. However, the EWG 16-01 suggests giving an opportunity for the MS to include a more detailed clarification about data collection strategy in an Annex of the new WP.
Information about data sources should be provided in the Excel tables and in the WP text. Among others, data sources could be based on questionnaires, accountings, (official) data, or combination of both. Data sources should be clearly stated for each variable. Descriptions on how the consistency of data coming from different data sources will be ensured, should be provided in the text. Where survey work is being undertaken, concise details should be given separately for each sector (fleet, aquaculture, fish processing) in the Annex about:

## - Data sources

- Type of data collection (Information about type of data collection scheme and explanation should be provided in the Excel tables and WP text. The column "Type of data collection scheme" in the Excel tables should be filled in with information: A - Census; B - Probability Sample Survey; C - Non-Probability Sample Survey; D-Indirect survey. In case the variable is not directly collected but estimated, an indirect survey is applied. In that case, further explanation on the data collection scheme and estimation method is provided in the WP text.)
- Target and frame population
- Sampling frame and allocation scheme
- Estimation
- Data quality (Due to the limited time for the discussion, the EWG 16-01 focused only on the planned part for the WP template. The quality indicators "Planned sample number", "Achieved sample number", "Coverage rate (\%)" and "Achieved sample rate (\%)" should be provided in the Annual Reports but excluded from the WP tables. However, in the WP text, it should be clearly stated which of the quality indicators will be provided for the AR and data calls.)

The main issues and changes for the WP modules are included in the following table:

| Table Modules NP/WP | Comments | Status |
| :---: | :---: | :---: |
| Table 15. Population segments for collection of economic data. | The column "Planned sample rate (\%)" could be flexible. The planned sample can be modified based on updated information on the total population (fleet register). <br> - The columns "Length class" and "Fishing technique" should include information about all active and inactive non-clustered fleet segments. The segments clustered with other segment(s) for sampling purposes should be marked with an asterisk. The information about classification of clustering should be provided in the WP text. The clustering schemes should be given by the Guidance document. <br> Information about inactive vessels should be provided in the Excel tables and WP text. The column "Fishing technique" for the inactive vessels should be filled in with "Inactive". <br> The column "Fishing technique" should provide only information about the name of the gear (refer to the EU MAP Table 6a), but not information if active or passive gear has been used. | Should be kept for WP templates |
| Table III.B. 2 Economic Clustering of fleet segments | Information should be provided in Table III.B. 1 and in the WP text. | Should be deleted from the WP templates. |


| Table III.B. 3 Economic Data collection strategy | Information should be provided in Table III.B.1. | Should be deleted from the WP templates. |
| :---: | :---: | :---: |
| Table 14. Fishing activity variables data collection strategy | The columns "Supra region", "Fishing technique" and "Length class" are included in the table. These columns could provide a link between the table on "Fleet Economic" and "Transversal" data collection. | Should be kept for WP templates |
| Table 16a. General overview of aquaculture activities | Should be updated according to the final version of the EU MAP. | Should be kept for WP templates |
| Table 16b. Population segments for collection of aquaculture data | The column "Planned sample rate (\%)" could be flexible. The planned sample can be modified based on updated information on the total population. <br> - The columns "Techniques" and "Species group" should provide a link between Tables IV.A. 1 and IV.A.2. | Should be kept for WP templates |
| Table IV.A. 3 Sampling strategy Aquaculture sector | Information should be provided in Table IV.A. 2 | Should be deleted from the WP templates. |
| Table 17. Processing industry: Population segments for collection of economic data | - The column "Planned sample rate (\%)" could be flexible. The planned sample can be modified based on updated information on the total population. <br> For the column "Segment" following segmentation are recommended: Companies <= 10 Companies 11-49 Companies 50-249 <br> - Companies $>=250$ | Should be kept for WP templates |
| Table IV.B. 2 Sampling strategy Processing industry | Information should be provided in Table IV.B. 1 | Should be deleted from the WP templates. |

## 4 REFERENCES

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## 5 CONTACT DETAILS OF STECF MEMBERS AND EWG-16-01 LIST OF PARTICIPANTS

1 - Information on STECF members and invited experts' affiliations is displayed for information only. In any case, Members of the STECF, invited experts, and JRC experts shall act independently. 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 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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## 6 LIST OF ANNEXES

Electronic annexes are published on the meeting's web site on:
https://stecf.jrc.ec.europa.eu/ewg 1601
List of electronic annexes documents:

1. EWG-16-01 - Annex 1-Proposal_COM_Decision_EU-MAP_EWG-16-01(doc)
2. EWG-16-02 - Annex 2 - Draft_Decision_WP_template_EWG_16-01 (doc)

## 7 LIST OF BACKGROUND DOCUMENTS

Background documents are published on the meeting's web site on:
https://stecf.jrc.ec.europa.eu/ewg1601
List of background documents:
3. EWG-16-01 - Doc 1 - Declarations of invited and JRC experts (see also section 6 of this report - List of participants)
4. EWG-16-01 - Doc. 2 - Draft COMMISSION DECISION of XXX adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors (European Commission, version 29 Feb 2016).
5. EWG-16-01 - Doc. 3 - NOTE TO STECF EXPERT WORKING GROUP 16-01, Subject: Opinion on the draft Union multi-annual programme on fisheries data collection and on the draft template for national work plans (European Commission, 24 Feb 2016).
6. EWG-16-01 - Doc. 4 - Draft COMMISSION IMPLEMENTING DECISION of XXX laying down rules on procedures, format and timetables for the submission of work plans for data collection (European Commission, version 4).
7. EWG-16-01 - Doc. 5 - Explanatory Notes on National Work plan templates - economic part (Ad-hoc expert Irina Davidjuka, March 2016), incl. 4 Annexes.
8. EWG-16-01 - Doc. 6 - Explanatory Notes on National Work plan templates - biological part (Ad-hoc expert Paolo Carpentieri, March 2016).

8 ANNEX 1 - DRAFT EU MAP WITH "TRACK CHANGES" BY THE EWG 16-01

Brussels, XXX
[...](2016) XXX draft

## COMMISSION DECISION

of XXX
adopting a multiannual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors

## COMMISSION DECISION

## of XXX

adopting a multiannual Union programme for the collection, management and use of
data in the fisheries and aquaculture sectors

## THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,
Having regard to Regulation (EC) No $\mathrm{xx} / \mathrm{xx}$ of xx and in particular xxx thereof, Whereas:
(1) Pursuant to Article xxx of Regulation (EC) No $\mathrm{xx} / \mathrm{xx}$ of xx , a multiannual Union programme for the collection, management and use of data in the fisheries sector is to be adopted for the purpose of uniform application of the obligation to collect and manage data. The current multiannual Union programme was prolonged by Commission decision C(2013)5243 until 31 December 2016. It is therefore necessary to establish the multiannual Union programme for the period starting 1 January 2017.
(2) The programme defines data collection requirements, in the scope defined in Article 1 of Regulation (EC) No $x x / x x$ in as far as they are not already required under other legislative frameworks and in accordance with the criteria defined in Article xx. It lists mandatory research surveys at sea in accordance with the requirements defined in Article xx and thresholds for participation by Member States in data collection and research surveys based on the criteria defined in Article xxx.
(3) When drafting the programme the Commission has taken account of the recommendations resulting from consultation with the Regional Co-ordination Groups referred to in Article 8 of Regulation (EC) No xx/xx, the Scientific, Technical and Economic Commitee for Fisheries (STECF) and the International Council for the Exploration of the Sea (ICES) in its role of other appropriate consultative scientific body in accordance with Article 4 (2) of Regulation (EC) No xx/xx.
(4) When drafting the programme the Commission has taken account of the objectives of of Regulation (EU) No 1380/2013 on the Common Fisheries Policy, in particular Article 25 on data collection, and Article 2, which states that the CFP shall ensure that fishing and aquaculture activities are environmentally sustainable in the long-term and are managed in a way that is consistent with the objectives of achieving economic, social and employment benefits, and of contributing to the availability of food supplies while gradually eliminating discards.
(5) The measures provided for in this Decision are in accordance with the opinion of the Management Committee for Fisheries and Aquaculture.
(6) The programme aims at supporting the regionalisation of the fisheries management measures enabling adequate scientific advice at regional level by encouraging cooperation between Member States by creating a stable multi-annual regional framework to better target data for sea-basin policies, such as the landing obligation. $\overline{,}$,

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Comment [A1]: This is a synthesis of recital n. 22 in the previous DCF regulation (highlighted), and the paragraph on Regional cooperationon page 22 in the Com. Staff working paper of June 2015

## HAS ADOPTED THIS DECISION:

Article 1
The multiannual Union programme for the collection, management and use of data in the fisheries sector for the period 2017 and beyond, as referred to in Article xx of Regulation (EC) No $x x / x x$, is set out in the Annex.

Article 2
This Decision is addressed to the Member States.
Done at Brussels,

# ANNEX ${ }^{1}$ <br> Multi annual Union programme for the collection, management and use of data in the fisheries and aquaculture sectors <br> Chapter I <br> Definitions 

1. For the purpose of this Union programme, definitions in Regulation No 1224/2009, 404/2011, 1380/2013 and $\mathrm{xx} / \mathrm{xx}$ and the following definitions shall apply:
(a) 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";
(b) 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;
(c) fishing days: any day at sea with fishing operationeach 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;
(e)(d) fishing ground: (group of) geographical units where fishing takes place based on existing areas defined by Regional Fisheries Management Organisations or scientific bodies, to be agreed within regional co-ordination;
(d)(e) mesh size range: range of mesh sizes of fishing nets as determined in accordance with Regulation (EC) No 517/2008;
(e)(f) metier: a group of fishing operations targeting a similar (assemblage of) species, using similar gear ${ }^{2}$, during the same period of the year and/or within the same area and which are characterised by a similar exploitation pattern;
(g) population of vessels: all vessels in the Union Fishing Fleet Register as defined in Commission Regulation (EC) No 26/2004 $\left({ }^{3}\right)$ _at a specific peint in time-on December 31st and any active vessel fishing at least one day during the yearduring the reference year;
(h) fleet segment: group of vessels with the same length class (LOA) and predominant fishing gear during the year;
(f) sampler/sampling staff: operating staff designated by the body in charge of the implementation of the Work Plans for Data Collection including samplers/observers at sea and in ports, and statisticians for socio-economic data;
(g)(i) sampling frame: list of all individuals or sampling units that can be selected independently with known probability by randomised sampling. The frame may

For reference, tables corresponding to former [Appendices] in Commission Decision 93/2010 are indicated in square brackets.
Gear types specified in Annex XI of Regulation (EU) No 404/2011
OJ L 5, 9.1.2004, p. 25-35.
represent the entire population of interest or may be incomplete because not all sampling units are accessible for sampling;
(h) 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;
(i)(i) _anadromous species: living aquatic resources with lifecycle starting by hatching in freshwater, migrating to saltwater, returning and finally spawning in freshwater;
(j)(k)_catadromous species: living aquatic resources with lifecycle starting by hatching in saltwater, migrating to freshwater, returning and finally spawning in saltwater;
(1) Index river: intensively monitored systems river basins that employ a variety of sampling methods to produce census and other biological data that include both juvenile and adult life stages of the target fish species. This definition extends to lagoons or other water bodies where these are the main productive area for eel;
(m) Catch fraction: is a part of the total catch, such as the part of the catch landed above the minimum conservation refrence size, the part landed below the minimum conservation reference size, the part discarded below the minimum conservation reference size, de minimis discards and discards;
(n) Population of aquaculture enterprises: enterprises whose primary activity is defined according to the Eurostat NACE codes 03.21 and 03.22 and who operate for profit;
(o) Population of processing enterprises: enterprises whose main activity is defined according to the EUROSTAT definition under NACE Code 10.20.
(p) research surveys at sea: A voyage dedicated to the collection of data for scientific purposes, carried out by a vessel designated for this task
(q) Fishing platforms for anadromous and catadromous species include registered vessels, non-registered vessels, fixed installations and 'on-foot'.
(k)

2. 2. Data collection methods shall be appropriate for the intended purposes defined in par. (1) and to inform end users of the quality of the data.

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In accordance with Articles 3, 4 and 5 of [Council Regulation (EC) No 199/2008 on the data collection framework for fisheries], and taking into account the thresholds set out in Chapter IV, Member States shall establish, as part of the workplans defined in Article 21 of Regulation (EU) No 508/2014, the data to be collected amonst the following sets: sampling plans for the collection of data on commercial fisheries based on statistically robust principles. The sampling schemes shall encompass the total landings into the Member State and fishing activities of vessels operating under the flag of the Member State.

## CHAPTER II <br> Data requirements

Data shall be collected to enable valid estimates to be derived for fisheries, temporal periods and areas determined by end-user needs agreed in the regional coordination groups.

Regional sampling plans for the collection on commercial and recreational fisheries put in place in accordance with Article 8 of [Council Regulation (EC) No 199/2008 on the data collection framework for fisheries] should be based on statistical robust principles which might imply that thresholds for sampling at the national level are redundant. In such case, this should be highlighted in the regional plan.
The data to be collected include the following sets:

1. Data to support assessment of the state of exploited marine resources and the level of fishing, stocks fished by Union commercial fisheries in Union and outside Union waters and by recreational fisheries in Union waters. These data consist of:
Catch quantities by species and biological data from individual specimens enabling the estimation of:
i. the volume and length frequency of all catch fractions by stock, reported at the aggregation level 6 in Table 3.
ii. the annual volume (number, weight and length composition) of catches and releases of recreational fisheries for the relevant species as listed in Table 4 or identified by pilot studies and management needs, subject to compilation by the RCGs. Where possible, multispecies data should be collected.
iii. the mean-weight and age distribution of stocks, listed in Table 1A, B and C in the catches,
iv. the sex-ratio, maturity ogives and fecundity data for stocks listed in Table 1A, B and C from commercial catches.

Detailed species lists, definitions, additional variables and specification of methodologies (including sampling intensity and frequency) may be compiled by the regional coordination groups in cooperation with the main end-users and taking account STECF recommendations.
a) For anadromous and catadromous species, as indicated in Table 2, stock related biological variables (for individual specimens, on age, length, weight, sex, and fecundity, by life stage, but further specified on a species and regional basis), and annual catch quantities by age class or life stage, caught by commercial and recreational fisheries, including during the freshwater part of their lifecycle.
b) In addition, in at least one Eel Index River basin per Eel Management Unit, information (e.g. data, estimates, relative trends, etc.) should be annually collected on the abundance of recruits, the abundance of the standing stock (yellow eel) and on the number orweight, and sex ratio of emigrating silver eels, and once every Eel Management Plan reporting period information should be collected on the other anthropogenic impacts that are reported in national assessments for Eel Management Plans. In all wild salmon and sea trout stocks in Index rivers, information should be annually collected on the abundance of smolt and parr and number of ascending individuals. The designation of Index Rivers to be approved by RCGs or ICES or equivalent.
2. Data to assist in the assessment of the impact of fisheries in Union waters and outside Union waters, on incidental by-catch of species, in particular species protected under
international or Union law, marine habitats and data on impacts of fisheries structure on food webs. These data consist of:
a) For all fisheries, incidental by-catch of all birds, mammals and reptiles and fish protected under Union legislation and international agreements, shall be observed and recorded including absence in the catch during fishery-dependent observer trips and fisheryindependent surveys.
In case fisheries observer trips are not considered to cover the data collection of incidental by-catch sufficiently for end-user needs, additional data collection may be implemented by MS after approval of RCGs based on end-user needs.
b) additional methodologies shall be implemented by MS.

In addtion to the species listed in Table 4, mulitspecies pilot studies of recreational fisheries catches and releases should be conducted regularly (every 5 years). This should include assessed stocks, protected, rare, vulnerable, threatened and endangered species, and other relevant species defined by the RCGs, and used by RCGs to assess need for further specific annual data collection requirements. The species to be included in the pilot studies will be decided by the RCGs.
c) Data to assist in the assessment of the impact of fisheries in Union waters and outside Union waters on marine habitats, the variables describing the impact of fisheries on the marine habitat should be covered sufficiently under the Control Regulation as these variables are considered as transversal variables. Should the quality of data collected under the Control Regulation be insufficient, additional data collection may be implemented by MS after approval of RCGs based on end-user needs. Data needed should be made available to the designated body in charge of the implementation of the national work plans.
d) For estimating the impact of fisheries on marine food webs, data shall be collected based on the end-user needs specified within regional coordination groups.
3. For the deep-sea fisheries, any additional biological data for scientific evaluation should be collected in accordance to the [ref. deep sea regulation]. Data specified in Table XX recorded in accordance with Council Regulation (EC) No. 1224/2009 shall be made available to the designated body in charge of the implementation of the national work plans. Where the quality of these data is not complying with the quality required for scientific purposes, these data can be collected using alternative methods. This is to be decided within the Regional Coordination Groups.
4. Research surveys at-sea as specified in Chapter III
5. Biological data on stocks 4 caught or by caught, including diseards, by Union commercial fisheries in Union and outside Union waters and by recreational fisheries in Union waters. These data consist of:

Stock related variables for the stocks listed in Table 1A, B and C [former Appendix VII] containing information, for individual specimens, on age, length, weight, sex, maturity and fecundity, further specified on a regional basis.

Gatch quantities by species and type of fisheries enabling the estimation of:
${ }^{4}$ Detailed lists, definitions, additional variables and specification of methodologies (including sampling intensity and frequency) may be compiled by the regional coordination groups in cooperation with the main end users and taking account of STECF recommendations.
quarterly length distribution of species in the catches,
quarterly volume of cateh fractions (ineluding diseards) for the stocks listed in Table 1A, B and C [former Appendix VI], reported at the aggregation level (metiers) in Table 3.
quarterly volume of catch of recreational fisheries for the relevant species as listed in Table 4 .
For anadromous and catadromous species, as indicated in Table 1E stock related variables and eatch quantities by age class, caught by commereial and recreational fisheries, ineluding during the freshwater part of their lifecycle and independent of the way these fisheries are undertaken. This ineludes in particular:
for European eels, all Eel Management Units established in accordance with regulation EC 1100/2007;
for salmon, all areas of natural distribution during the freshwater part of the lifecycle;
for sea trout, all river basins/water bodies connected to the Baltic Sea.
In addition, in at least one Eel Index river basin per Eel Management Unit, information should be anntally collected on the abundance of recruits, the abundance of the standing stock (yellow eel) and on the number, weight and sex ratio of emigrating silver eels. In all wild salmon stocks in index rivers, information should be anmtally collected on the abundance of smolt and parr and number of ascending individuals.

Data to assess the impact of Union fisheries on the marine ecosystem in Union waters and outside Union waters, including data on by catch of non target species5, data on impacts of fisheries on marine habitats and data on impacts of fisheries structure of food webs. These data consist of:

For all fisheries listed in Table 3 [former Appendix IV], incidental by catch of all birds, mammals and turtles and and non-commercial fish protected under Union legislation and international agreements, in particular the species listed in table 1 D , shall be recorded during observer trips and surveys on a haul by haul basis.
Unless this information is already available, pilot studies shall be performed for each type of fisheries in order to establish, for each metier, what data are needed to estimate its impact when combined with data referred under (3). These pilot studies shall unable the evaluation of measures to reduce the impact of commercial and recreational ${ }^{6}$ fisheries on the marine ecosystem, on vulnerable marine resources and on marine biodiversity ${ }^{7}$ and ecosystems, as well as Commission measures in case of serious threaths to marine biological resources as provided for in Article 7, 11 and 12 of Regulation (EU) No 1380/2013. In particular, the impact on sea-
${ }^{5}$ - In particular species protected under international or Union law and for monitoring under the CTTES Regulation (Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauma and flora by regulating trade therein Official Journal L 061, 03/03/1997 P. 0001 0069).

The future DCF Regulation provides for an increased effort to collect seientific data on recreational fisheries. In their advice about the future EU Multiannual Programme, STECF $14-07$ advised to add to the existing data requirements (see above) that eel and salmon data be collected in all regions (including fresh water), and that in the Baltic Sea trout, in the North Sea and Eastern Arctic European lobster, Sea bass and Pollack, in North Atlantic Pollack, Sea bass in the Mediterranean and Black Sea all highly migratory ICCAT species and data on ecosystem impact of recreational fisheries be collected. STECF 14-19 (Med assessments) signals the need to collect recreational data on seabream.

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floor habitat types ${ }^{8}$ and their associated benthic communities shall be estimated in deep sea metiers ${ }^{9}$ to enable the identification of vulnerable habitats and, when needed, for management measures in other metiers. These requirements may be further specified within regionat eoordination groups.
For estimating the impact of fisheries on marine food webs ${ }^{10}$, data needed to enable pilot studies on the ecological relationships between commercial and other species, including analysis of stomach contents of key species, shall be collected based on the end users needs specified within regional coordination groups.
For the deep sea species listed in Table 1 D, Member States shall ensure that data collected for an area that comprises both Union waters and international waters shall be further disaggregated so that they refer to Union waters or to international waters separately.

In addition, data collection for deep sea métiers shall be done separately from other metiers.* Discards shall be sampled in all deep sea métiers. Member States shall also collect the geographical location of the fishing activities on a haul by haul basis and the fishing depths at which the gears are deployed, in case the vessel is subject to reporting by electronic logbook....
Data to assess the activity of Union fishing vessels in Union waters and outside Union waters consist of the variables as indicted in Table 5 [former Appendix VIII]. Primary data as reported under Regulation 1224/2009 are to be made available to the designated body in charge of the implementation of the national work plansto the National Institutions implementing the Working Plans. When data are not to be collected under Regulation 1224/2009 or when data collected under Regulation 1224/2009 are not appropriate for scientific use, they can be collected using alternative statistical methods. These statistical methods should allow for the estimation of variables listed in Table 5 at the lowest relevant geographic level by fleet segment (table 6a) and metier level 6 (table 3)
6. Detailed data on the activity of Union fishing vessels in Union waters and outside Union waters as reported under Regulation $1224 / 2009$ must be made available to end-users as a supplement to biological and economic data. Variables to be made available are listed in Table 5 [former Appendix VIII]. Estimates shall be made based on representative samples where data are not to be collected under Regulation 1224/2009 as regards certain segments of the fleet, certain geographical areas or quantities of fish landed below a certain threshold, or where geographical areas are insufficiently covered. These sampling programmes should allow for the estimation of such parameters at the lowest relevant geographic level.
Social and economic data on fisheries shall be collected to enable the assessment of the social and economic performance of the Union commercial fisheries sector. They consist of:
a) Economic variables as indicated in Table 6 [former Appendix VI]. according to the sector segmentation of Table 6 [former Appendix III] and according to the supraregions as defined in table 6b [former Appendix II]. 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.-In addition For inactive vessels only capital value, capital cost, investments and subsidies on investment have to be collected for inactive vessels. In cases where a fleet segment has less than 10 vessels, clustering may be necessary in order to design the

[^1]sampling plan and to report economic variables. Economic data shall be collected on a annual basis.
b) Social variables as indicated in Table 7. Social data shall be collected every three years.

Detailed definitions and specification of methodologies may be compiled by the European coordination groups (?PGECON?) in cooperation with end users and taking account of STECF recommendations.
7. Social and economic data and sustainability data on aquaculture shall be collected Social and-economic data and sustainability data on aquaculture to enable the assessment of the social and-economic performance and the sustainability of the Union aquaculture sector, including its environmental impact. They consist of:
a) Economic variables as indicated in Table 8 [Appendix X] according to the sector segmentation of Table 9 [former Appendix XI]. The population is all enterprises whose primary activity is defined according to the Eurostat NACE codes 03.21 and 03.22 and who operate for profit. Economic data shall be collected on annual basis.
b) Social variables as indicated in Table 7. Social data shall be collected every three years.
c) Sustainability data on aquaculture as indicated in Table 10.

Detailed definitions and specification of methodologies may be compiled by the European coordination groups (?PGECON?) in cooperation with end users and taking account of STECF reccomendations.
Detailed information on implementation of aquaculture data collection shall be provided in workplans, taking into account data requirements specified in Reg. xx (RECAST)
8. Social and economic data on fisheries processing sector shall be collected Social and economic data are needed-to enable the assessment of the social and -economic performance of the Union fisheries processing sector. They consist of:
Economic variables as indicated in Table 11 according to the segmentation specified within relevant European expert groups (?PGECON?). The population is all enterprises whose main activity is defined according to the EUROSTAT definition under NACE Code 10.20.
Economic variables for main activity enterprises shall be collected on annual basis. Number of enterprises and turnover for non-main activity enterprises shall be collected biennially.
Workplans shall clearly identify the variables and the part of the population covered through Regulation (EC) No 295/2008 concerning structural business statistics and the variables and the part of the population that have to be covered through additional data collection methods.
Social variables as indicated in Table 7. Social data shall be collected every three years.
Detailed definitions and specification of methodologies may be compiled by the European coordination groups (?PGECON?) in cooperation with end users and taking account of STECF recommendations.

## CHAPTER III Research surveys at sea

1. At least all research surveys at sea listed in Table 12 shall be carried out.
2. Member States' respective contribution to international surveys shall be agreed within Regional Co-ordination Groups.
3. Member States participating in the surveys shall include them in their national or regional workplans defined in Article 21 of Regulation (EU) No 508/2014.
4. Member States shall guarantee within their national or regional work plans continuity with previous survey designs.

## CHAPTER HH Research surveys at sea

1. At least all researeh surveys at sea listed in Table 12 [former Appendix IX] shall be carried eut.
2. For anadromous and catadromous species, recruitment surveys and surveys for standing stock can also be carried out in rivers and other freshwater bodies.
3. Member States shall establish, as part of the workplans defined in Article 21 of Regulation (EU) No 508/2014, the researehe strveys at sea to be carried and shal respensible for these surveys.
4. Member States' respective contribution to international strveys shall be diseussed within Regional Co-ordination Groups.
5. Member States shall guarantee within their national or regional work plans continuity with previous survey designs.
6. Notwithstanding points 1 and 2, Member States may adapt, as part of their work plan, the survey effort or sampling design, provided that this does not negatively affect the quality of the results and provided that this is coordinated within regional coordination groups. Member States may agree to redistribute certain tasks and contributions with other Member States in the same region, but will remain primarily responsible for carrying out their own tasks. Any agreements to do this shall be notified to the Commission. [articulation with workplan template to be further elaborated]

## CHAPTER IV <br> Thresholds

## For biological data

The following thresholds shall apply for data collection of commercial and recreational fisheries in EU waters and on EU vessels ${ }^{11}$ in the absence of, probability based sampling designs, regional sampling plans or agreements with end-users in the Regional Coordination Groups :

1. No biological data (individual length, weight, age, sexual maturity, fecundity) need to be collected if, for a certain fish stock or species, the Union's share of international stocks is less than $10 \%$.
2. The national work plan of a Member State may exclude the collection of biological data for stocks for which TAC's and quota have been defined under the following conditions:
(a) the relevant quota must correspond to less than $10 \%$ of the Union 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 $10 \%$ or 200 tonnes, must account for less than $25 \%$ of the Union share of the TAC.
(c) Should the quota of a MS fall below 200 tonnes but be greater than $10 \%$ of the Union share of the TAC the Regional Coordination Group shall assess the impact on sampling at the Regional level before a derogation from sampling can be agreed.
3. For stocks for which TAC's and quotas have not been defined and which are outside the Mediterranean Sea and Black Sea, the same rules established under point 2 apply on the basis of the average landings of the previous three years and with reference to the total Union landings from a stock;
4. For stocks in the Mediterranean Sea and Black Sea, the landings by weight of a Member State for a species corresponding to less than $10 \%$ of the total Union landings from the Mediterranean Sea and Black Sea, or to less than 200 tonnes.
5. No thresholds should be applied for Bluefin tuna.

## For anadromous and catadromous species

6. For eels, no biological data from fisheries (commercial and recreational) need to be collected in an Eel Management Unit when total catches are less than: either 25 tonnes of silver-eel-equivalents; or less than $0.1 \%$ of total Community catches. No fishery-independent biological data need to be collected when eel are rare, subject to agreement with the RCGs.
7. For salmon and sea trout, no thresholds should be applied.

## For recreational fisheries data

1. Without prejudice to provisions on sampling of recreational fisheries set out in Regulation 1224/2009, data shall be collected to allow estimates of total recreational catches of stocks subject to recovery plans, and for other species listed in Table 4.
2. In the first instance, a threshold for MS to estimate recreational catches of these species in defined areas shall be where existing data show that the total recreational catches (harvest and releases) of these species in the defined areas represent more than 5\% of the

[^2]combined commercial catches (landings and discards) and recreational catches for any individual stock.
3. The appropriateness of such a threshold for any species will be reviewed by RCGs and STECF where landings are reduced due to high voluntary or mandatory release rates or where there is high or unknown post-release mortality.
4. In the absence of recreational catch estimates by a MS for any of the required species, pilot studies shall be carried out to evaluate the catches in relation to the $5 \%$ threshold as defined in point 2.

## For social and economic data

The following thresholds shall apply for EU waters and EU vessels ${ }^{12}$ :

1. No biological data need to be collected if, for a certain fish stock or species, a Member State's share of the related TAC, or in case there are ne TACs fixed, total landings, are less than $3 \%$ of the total of the Union or, in the Mediteranean, less than 10\%. The latter exception does not apply to Bluefin tuna. Regional coordination groups may develop alternative or more specific thresholds regionally in the absence of TACs.
2. No biological data need to be collected if, for a certain fish stock or species, a Member State's total landings is less than 100 tomnes, or in the Mediterranean, less than 200 tonnes. The latter exception does not apply to Bluefin tuna.
3. For eels, no biological data need to be collected in an Eel Management Unit when eatches are less than 25 tonnes.
4. No biologieal data need to be collected if, for a certain fish stock or species, the Union's share of international stocks is less than $10 \%$.
5. Without prejudice to provisions on sampling of recreational fisheries set out in Regulation 1224/20, no data on recreational fisheries need to be collected if estimates for a fish stock indicate that less than $5 \%$ of fishing mortality may be caused by recreational fisheries. Such estimates may be based based on licences or number of vessels amongst others. If there is recent precise information available for a stock, the applieable threshold shall be $10 \%$. No threshold shall apply to fish stock subject to recovery plans such as those applying to large pelagic species.
7.6. With regard to social and economic aquaculture data, Member States may define a simplified methodology in their workplan if the total aquaculture production volume and value, as reported in the Member States' latest submission under Regulation (EC) No $762 / 2008$, are both less than $1 \%$ of the total EU aquaculture production volume and value. The EU aquaculture production volume and value shall be the most recent data published by Eurostat. In this case, no socio-economic aquaculture data need to be provided on the production of species which account for less than $10 \%$ of the Member State's aquaculture production by both volume and value, as reported in the Member States' latest submission under Regulation (EC) No 762/2008. Alternative methods may also be developped for enterprises whose activities are not mainly aquaculture.
6. With regard to aquaculture sustainability data, Member States may define a simplified methodology in their workplan to estimate these data on a biennial basis. No aquaculture sustainability data need to be provided if the total aquaculture production volume and

[^3]value, as reported in the Member States' latest submission under Regulation (EC) No $762 / 2008$, are both less than $2.5 \%$ of the total EU aquaculture production volume and value respectively. The EU aquaculture production volume and value shall be the most recent data published by Eurostat.

## For research surveys at sea

8. Participation (physical or financial) in research surveys at sea is mandatory above a threshold of $3 \%$ of the EU TACs for a given stock where TACs are established. In regions without TACs management, participation (physical or financial) in research surveys at sea is mandatory above a threshold of $3 \%$ of the total EU landings for a given stock of the preceding 5 years. Regional coordination groups may develop alternative thresholds in the absence of TACs and in the case of multispecies surveys.

Table 1A [former Appendix VII]

Basic list of species in sea basins in EU waters for which additional biological variables (age, weight, sex, maturity, fecundity) [former appendix I and II]) further specified in the EUMAP guidance document shall be collected

| Species (common name) | Species (Scientific name) | Area where the Stock is located/stock code |
| :---: | :---: | :---: |
|  | ICES areas I, II |  |
| Tusk | Brosme brosme | I, II |
| Atlanto-Scandian herring | Clupea harengus | I, II,V, XIVa |
| Cod | Gadus morhua | I, II |
| Capelin | Mallotus villosus | I, II |
| Haddock | Melanogrammus aeglefinus | I, II |
| Blue whiting | Micromesistius poutassou | I-IX, XII, XIV |
| Northern shrimp | Pandalus borealis | I, II |
| Saithe | Pollachius virens | I, II |
| Greenland halibut | Reinhardtius hippoglossoides |  |
| Mackerel | Scomber scombrus | II, IIIa, IV, V, VI, VII, VIII, IX |
| GoldenRedfish | Sebastes norvegicus | I, II |
| Deep sea Redfish | Sebastes mentella. | I, II |
| Horse mackerel | Trachurus trachurus | IIa, IIIa, IVa, Vb, VIa, VIIa-c, e-k, VIIIa-e |
|  | Skagerrak and Kattegat - ICES area IIIa |  |
| Sand eel | Ammodytidae | IIIa |


| Herring | Clupea harengus | IV, VIId, IIIa/22-24, IIIa |
| :---: | :---: | :---: |
| Roundnose grenadier | Coryphaenoides rupestris | IIIa |
| Grey gurnard | Eutrigla gurnardus | IIIa |
| Red gurnard | Aspitrigla cuculus | IIIa, IV |
| Cod | Gadus morhua | IV, VIId, IIIaN |
| Cod | Gadus morhua | IIIaS |
| Witch flounder | Glyptocephalus cynoglossus | IIIa |
| Dab | Limanda limanda | IIIa |
| Haddock | Melanogrammus aeglefinus | IV, IIIa |
| Whiting | Merlangius merlangus | IIIa |
| Hake | Merluccius merluccius | IIIa, IV, VI, VII, VIIIab |
| Blue whiting | Micromesistius poutassou | I-IX, XII, XIV |
| Norway lobster | Nephrops norvegicus | Functional unit |
| Northern shrimp | Pandalus borealis | IIIa, IVa east |
| Plaice | Pleuronectes platessa | IIIa |
| Saithe | Pollachius virens | IV, IIIa, VI |
| Turbot | Psetta maxima | all areas |
| Mackerel | Scomber scombrus | II, IIIa, IV, V, VI, VII, VIII, IX |
| Brill | Scophthalmus rhombus | IIIa |
| Sole | Solea solea | IIIa, 22 |
| Sprat | Sprattus sprattus | IIIa |
| Norway pout | Trisopterus esmarki | IV, IIIa |
|  | Baltic Sea - ICES Subdivisions 22-32 |  |
| Herring | Clupea harengus | $\begin{aligned} & 22-24 / 25-29, \\ & \text { Gulf of Riga } \end{aligned}$ |
| Common Whitefish | Coregonus lavaretus | IIId |
| Vendace | Coregonus albula | 22-32 |

Comment [A2]: Red Gurnard : Red
Gurnard was added to the WGWIDE stock
list last year. It's stock definition (III, IV, V, VI, VII and VIII) includes III a and so should be listed.

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Comment [A3]: Changes in accordance with suggestion from RCM Baltic 2015 . Red should go out, green should go in

| Cod | Gadus morhua | 22-24/25-32 |
| :---: | :---: | :---: |
| Dab | Limanda limanda | 22-32 |
| Whiting | Merlangius merlangus | 22-32 |
| Smelt | Osmerus eperlanus | 22-32 |
| Perch | Perca fluviatilis | IIId |
| Flounder | Platichtys flesus | 22-32 |
| Plaice | Pleuronectes platessa | 22-32 |
| Turbot | Psetta maxima | 22-32 |
| Pike-perch | Sander lucioperca | IIId |
| Brill | Scophthalmus rhombus | 22-32 |
| Sole | Solea solea | 22 |
| Sprat | Sprattus spratus | 22-32 |
|  | North Sea and Eastern Channel - ICES areas IV, VIId |  |
| Sand eel | Ammodytidae | IV |
| Catfish | Anarhichas spp. | IV |
| Argentine | Argentina spp. | IV |
| Red gurnard | Aspitrigla cuculus | IIIa, IV |
| Tusk | Brosme brosme | IV, IIIa |
| Herring | Clupea harengus | IV, VIId, IIIa |
| Common Shrimp | Crangon crangon | IV, VIId |
| Sea bass | Dicentrarchus labrax | IV, VIId |
| Grey gurnard | Eutrigla gurnardus | IV |
| Cod | Gadus morhua | IV, VIId, IIIa |
| Witch flounder | Glyptocephalus cynoglossus | IV |
| Blue-mouth rockfish | Helicolenus dactylopterus | IV |
| Four-spot megrim | Lepidorhombus boscii | IV, VIId |
| Megrim | Lepidorhombus whiffiagonis | IV, VIId |
| Dab | Limanda limanda | IV, VIId |


| Black-bellied angler | Lophius budegassa | IV, VIId |
| :---: | :---: | :---: |
| Anglerfish | Lophius piscatorius | IIIa, IV, VI |
| Roughhead grenadier | Macrourus berglax | IV, IIIa |
| Haddock | Melanogrammus aeglefinus | IV, IIIa |
| Whiting | Merlangius merlangus | IV, VIId |
| Hake | Merluccius merluccius | IIIa, IV, VI, VII, VIIIab |
| Blue whiting | Micromesistius poutassou | I-IX, XII, XIV |
| Lemon sole | Microstomus kitt | IV, VIId |
| Blue ling | Molva dypterygia | IV, IIIa |
| Ling | Molva molva | IV, IIIa |
| Red mullet | Mullus barbatus | IV, VIId |
| Striped red mullet | Mullus surmuletus | IV, VIId |
| Norway lobster | Nephrops norvegicus | all functional units |
| Northern shrimp | Pandalus borealis | IIIa, IVa East/IVa/IV |
| Common scallop | Pecten maximus | VIId |
| Greater Forkbeard | Phycis blennoides | IV |
| Forkbeard | Phycis phycis | IV |
| Flounder | Platichthys flesus |  |
| Plaice | Pleuronectes platessa | IV |
| Plaice | Pleuronectes platessa | VIId |
| Saithe | Pollachius virens | IV, IIIa, VI |
| Turbot | Psetta maxima | IV, VIId |
| Greenland halibut | Reinhardtius <br> hippoglossoides | IV |
| Mackerel | Scomber scombrus | $\begin{aligned} & \text { II, IIIa, IV, V, VI, VII, } \\ & \text { VIII, IX } \end{aligned}$ |
| Brill | Scophthalmus rhombus | IV, VIId |
| Redfish | Sebastes mentella. | IV |


| Sole | Solea solea | IV |
| :---: | :---: | :---: |
| Sole | Solea solea | VIId |
| Sprat | Sprattus sprattus | IV/VIIde |
| Horse mackerel | Trachurus trachurus. | IIa, IVa, Vb, VIa, VIIa-c, e-k, VIIIa-e/IIIa, IVbc, VIId |
| Tub gurnard | Trigla lucerna | IV |
| Norway pout | Trisopterus esmarki | IV, IIIa |
| John Dory | Zeus faber | IV, VIId |
|  | North East Atlantic and Western Channel ICES areas V, VI, VII (excluding d), VIII, IX, X, XII, XIV |  |
| Smoothhead | Alepocephalus bairdii | VI, XII |
| Sand eel | Ammodytidae | Via |
| Boarfish | Capros aper | V, VI,VII |
| Scallop | Pecten maximus | IV, VI, VII |
| Queen scallop | Aequipecten opercularis | VII |
| Spider crab | Maja squinado | V, VI,VII |
| Scabbardfish | Aphanopus spp. | all areas |
| Argentine | Argentina spp. | all areas |
| Meagre | Argyrosomus regius | all areas |
| Red gurnard | Aspitrigla cuculus | all areas |
| Alfonsinos | Beryx spp. | all areas, excluding X and IXa |
| Alfonsinos | Beryx spp. | IXa and X |
| Edible crab | Cancer pagurus | all areas |
| Herring | Clupea harengus | VIa/VIaN/ <br> VIa S, VIIbc/VIIa/VIIj |
| Conger | Conger conger | all areas, excluding X |
| Conger | Conger conger | X |
| Roundnose grenadier | Coryphaenoides rupestris | all areas |
| Kitefin shark | Dalatias licha | All areas |


| Common stingray | Dasyatis pastinaca | VII, VIII |
| :---: | :---: | :---: |
| Birdbeak dogfish | Deania calcea | , V, VI, VII, IX, X, XII |
| Sea bass | Dicentrarchus labrax | all areas, excluding IX |
| Sea bass | Dicentrarchus labrax | IX |
| Wedge sole | Dicologoglosa cuneata | VIIİ, IX |
| Anchovy | Engraulis encrasicolus | IXa (only Cádiz) |
| Anchovy | Engraulis encrasicolus | VIII |
| Velvet belly | Etmopterus spinax | VI, VII, VIII |
| Grey gurnard | Eutrigla gurnardus | VIId, |
| Cod | Gadus morhua | Va/Vb/VIa/VIb/VIIa/VIIe- <br> k |
| Witch | Glyptocephalus cynoglossus | VI, VII |
| Bluemouth rockfish | Helicolenus dactylopterus | all areas |
| Lobster | Homarus gammarus | all areas |
| Orange roughy | Hoplostethus atlanticus | all areas |
| Silver scarbbardfish | Lepidopus caudatus | IXa |
| Four-spot megrim | Lepidorhombus boscii | VIIIc, IXa |
| Megrim | Lepidorhombus whiffiagonis | VI/VII, VIIIabd/VIIIc, IXa |
| Dab | Limanda limanda | VIIe/VIIa,f-h |
| Common squid | Loligo vulgaris | all areas, excluding VIIIc, IXa |
| Common squid | Loligo vulgaris | VIIIc, IXa |
| Black-bellied angler | Lophius budegassa | IV, VI/VIIb-k, VIIIabd |
| Black-bellied angler | Lophius budegassa | VIIIc, IXa |
| Anglerfish | Lophius piscatorious | IV, VI/VIIb-k, VIIIabd |

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| Anglerfish | Lophius piscatorious | VIIIc, IXa |
| :---: | :---: | :---: |
| Capelin | Mallotus villosus | XIV |
| Haddock | Melanogrammus aeglefinus | $\mathrm{Va} / \mathrm{Vb}$ |
| Haddock | Melanogrammus aeglefinus | VIa/VIb/VIIa/VIIb-k |
| Whiting | Merlangius merlangus | VIII/IX, X |
| Whiting | Merlangius merlangus | Vb/VIa/VIb/VIIa/VIIe-k |
| Hake | Merluccius merluccius | $\begin{aligned} & \text { IIIa, IV, VI, } \\ & \text { VIIIab/VIIIc, Ixa } \end{aligned}$ |
| Wedge sole | Microchirus variegatus | all areas |
| Blue whiting | Micromesistius poutassou | I-IX, XII, XIV |
| Lemon sole | Microstomus kitt | all areas |
| Blue ling | Molva dypterygia | all areas, excluding X |
| Spanish ling | Molva macrophhtalma | X |
| Ling | Molva molva | all areas |
| Striped red mullet | Mullus surmuletus | all areas |
| Starry smoothhound | Mustelus asterias | VI, VII, VIII, IX |
| Smooth-hound | Mustelus mustelus | VI, VII, VIII, IX |
| Blackspotted smooth-hound | Mustelus punctulatus | VI, VII, VIII, IX |
| Norway lobster | Nephrops norvegicus | VI Fuctional unit |
| Norway lobster | Nephrops norvegicus | VII Functional unit |
| Norway lobster | Nephrops norvegicus | VIII, IX Functional unit |
| Common octopus | Octopus vulgaris | all areas, excluding VIIIc, IXa |
| Common octopus | Octopus vulgaris | VIIIc, IXa |
| Sea bream | Pagellus bogaraveo | IXa, X |
| Pandalid shrimps | Pandalus spp. | all areas |


| White shrimp | Parapenaeus longirostris | IXa |
| :---: | :---: | :---: |
| Greater Forkbeard | Phycis blennoides | all areas |
| Forkbeard | Phycis phycis | all areas |
| Plaice | Pleuronectes platessa | VIIa/VIIe/VIIfg |
| Plaice | Pleuronectes platessa | VIIbc/VIIh-k/VIII, IX, X |
| Pollack | Pollachius pollachius | all areas except IX, X |
| Pollack | Pollachius pollachius | IX, X |
| Saithe | Pollachius virens | Va/Vb/IV, IIIa, VI |
| Saithe | Pollachius virens | VII, VIII |
| Wreckfish | Polyprion americanus | X |
| Turbot | Psetta maxima | all areas |
| Greenland halibut | Reinhardtius hippoglossoides | V, XIV/VI |
| Atlantic halibut | Hypoglossus hypoglossus | V, XIV |
| Sardine | Sardina pilchardus | VIIIabd/VIIIc, IXa |
| Spanish mackerel | Scomber colias | VIII, IX, X |
| Mackerel | Scomber scombrus | II, IIII, IV, V, VI, VII, VIII, IX |
| Brill | Scophthalmus rhombus | all areas |
| Golden Redfish | Sebastes norvegicus | ICES Sub areas V, VI, XII, XIV \& NAFO SA $2+$ (Div. $1 \mathrm{~F}+3 \mathrm{~K}$ ). |
| Deep sea Redfish | Sebastes mentella | ICES Sub areas V, VI, <br> XII, XIV \& NAFO SA $2+$ <br> (Div. 1F + 3K) |
| Cuttlefish | Sepia officinalis | all areas |
| Sole | Solea solea | VIIa/VIIfg |
| Sole | Solea solea | VIIbc/VIIhjk/IXa/VIIIc |


| Sole | Solea solea | VIIe |
| :---: | :---: | :---: |
| Sole | Solea solea | VIIIab |
| Sea breams (in plural) | Sparidae | all areas |
| Mediterranean horse mackerel | Trachurus mediterraneus | VIII, IX |
| Blue jack mackerel | Trachurus picturatus | VIII, IX, X |
| Horse mackerel | Trachurus trachurus | IIa, IVa, Vb, VIa, VIIa-c, e-k, VIIIa-e/X |
| Horse mackerel | Trachurus trachurus | IXa |
| Pouting | Trisopterus spp. | all areas |
| John Dory | Zeus faber | all areas |
| Mediterranean Sea and Black Sea |  |  |
| Common name | Latin name | FAO Divisions |
| Giant red shrimp | Aristeomorpha foliacea | 1.3, 2.2 |
| Red shrimp | Aristeus antennatus | $1.1,1.3$ |
| Bogue | Boops boops | 1.2, 1.3, 2.1, 2.2, 3.1, 3.2 |
| Dolphinfish | Coryphaena equiselis | $\begin{gathered} \text { 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, } \\ 3.2 \end{gathered}$ |
| Dolphinfish | Coryphaena hippurus | $\begin{gathered} 1.1,1.2,1.3,2.1,2.2,3.1, \\ 3.2 \\ \hline \end{gathered}$ |
| Sea bass | Dicentrarchus labrax | 2.1, |
| Horned octopus | Eledone cirrosa | 1.1, 1.3, 2.1, 2.2, 3.1 |
| Musky octopus | Eledone moschata | 1.3, 2.1, 2.2, 3.1 |
| Anchovy | Engraulis encrasicolus | $\begin{gathered} \text { 1.1, 1.2, 1.3, 2.1. 2.2, 3.1, } \\ 3.2,4.2 \end{gathered}$ |
| Grey gurnard | Eutrigla gurnardus | 2.2, 3.1 |
| Squid | Illex spp., Todarodes spp. | $\begin{gathered} 1.1,1.2,1.3,2.1,2.2,3.1, \\ 3.2 \end{gathered}$ |
| Billfish | Istiophoridae | $\begin{gathered} \text { 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, } \\ 3.2 \\ \hline \end{gathered}$ |
| Common squid | Loligo vulgaris | $\begin{gathered} 1.1,1.2,1.3,2.1,2.2,3.1, \\ 3.2 \\ \hline \end{gathered}$ |
| Black-bellied angler | Lophius budegassa | 1.1, 1.2, 1.3, 2.2, 3.1 |
| Anglerfish | Lophius piscatorius | 1.1, 1.2, 1.3, 2.2, 3.1 |
| Hake | Merluccius merluccius | $\begin{gathered} \text { 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, } \\ 3.2 \\ \hline \end{gathered}$ |


| Blue whiting | Micromesistius poutassou | 1.1, 3.1 |
| :---: | :---: | :---: |
| Grey mullets | Mugilidae | 1.3, 2.1, 2.2, 3.1,4.2 |
| Red mullet | Mullus barbatus | $\begin{gathered} 1.1,1.2,1.3,2.1,2.2,3.1, \\ 3.2,4.2 \\ \hline \end{gathered}$ |
| Striped red mullet | Mullus surmuletus | $\begin{gathered} 1.1,1.2,1.3,2.1,2.2,3.1, \\ 3.2 \end{gathered}$ |
| Norway lobster | Nephrops norvegicus | 1.1, 1.2, 1.3, 2.1, 2.2, 3.1 |
| Common octopus | Octopus vulgaris | $\begin{gathered} \text { 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, } \\ 3.2 \end{gathered}$ |
| Pandora | Pagellus erythrinus | $\begin{gathered} \text { 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, } \\ 3.2 \\ \hline \end{gathered}$ |
| White shrimp | Parapenaeus longirostris | $\begin{gathered} 1.1,1.2,1.3,2.1,2.2,3.1, \\ 3.2 \end{gathered}$ |
| Caramote prawn | Penaeus kerathurus | 3.1 |
| Turbot | Psetta maxima | 4.2 |
| Sardine | Sardina pilchardus | $\begin{gathered} \text { 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, } \\ 3.2 \end{gathered}$ |
| Mackerel | Scomber spp. | $\begin{gathered} \text { 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, } \\ 3.2 \end{gathered}$ |
| Cuttlefish | Sepia officinalis | $\begin{gathered} \text { 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, } \\ 3.2 \end{gathered}$ |
| Sole | Solea vulgaris | 2.1 |
| Gilthead sea bream | Sparus aurata | 1.2, 3.1 |
| Picarels | Spicara smaris | 2.1, 3.1, 3.2 |
| Sprat | Sprattus sprattus | 4.2 |
| Mantis shrimp | Squilla mantis | 2.1 |
| Mediterranean horse mackerel | Trachurus mediterraneus | $\begin{gathered} \text { 1.1, 1.2, 1.3, 2.1, 2.2, 3.1, } \\ 3.2,4.2 \end{gathered}$ |
| Horse mackerel | Trachurus trachurus | 1.1, 1.2, 1.3, 2.2, 3.1, 3.2 |
| Tub gurnard | Trigla lucerna | 1.3, 2.2, 3.1 |
| Clam | Chamelea gallina | 2.1, 2.2,4.2 |
| Swordfish | Xiphias gladius | $\begin{gathered} 1.1,1.2,1.3,2.1,2.2,3.1, \\ 3.2 \end{gathered}$ |

EN

Table 1B [former Appendix VII]
List of biological variables defined by stocks in sea basins of Outermost Regions of the Union


* Invasive species to be recorded in all landings and catches but no biological sampling required.

Reunion Island and Mayotte

| Tuna-like fish | Scombridae |
| :--- | :--- |
| Swordfish | Xiphias gladius |
| Other bill fishes | Istiophoridae |
| $\underline{\text { Dolphinfish }}$ | Coryphaena hippurus |

Comment [A4]: Too undefined. Main targeted species are Arius parkeri (Gillbacker sea catfish - Machoiron jaune) and Arius proos (Cruxifix sea catfish Machoiron blanc).
Comment [A5]: Really the main target species of the Centropomidae familly
Comment [A6]: Epinephelus itajarra is the main species targeted by fishermen. To be more defined ?

Comment [A7]: Invasive species. Only to be registered in the catch or landings, without length or biological sampling

Comment [A8]: Be more precise. Two species Thunnus atlanticus (black fin tuna - thon noir) and Thunnus albacares
(yellowfin tuna -thon albacore) to be included in the list of mandatory species.
Comment [A9]: Main LPF species target species in Antilles area. Must be clearly listed as mandatory species (end user ICCAT)

Comment [A10]: Swordfish (Xiphias gladius) is the only target species. Must be listed such as.

Azores, Madeira and Canary Islands:

| Atlantic chub mackerel | Scomber colias |
| :--- | :--- |
| Sardinella | Sardinella maderensis |
| Horse mackerel | Trachurus spp. |
| Sardine | Sardina pilchardus |
| Parrotfish | Sparisoma cretense |
| Limpets | Patellidae |

## Table 1C [former Appendix VII]

## List of Biological variables defined by stocks in sea basins under RFMOs and SFPAs

## IATTC

| SPECIES <br> When designing sampling plans aiming at collecting biological information as laid down in chapter III of this Commission decision, stock boundaries, as fixed by the competent RFMOs of RFOs, will have to be taken into account and appropriate sampling effort will be allocate to each stock. |  |  |  | Frequency of Collection of Biological variables: |
| :---: | :---: | :---: | :---: | :---: |
| Scientific name | Common name | Geographical Area | Priority |  |
| Thunnus <br> albacares | Yellowfin tuna | East Pacific Ocean | High |  |
| Thunnus obesus | Bigeye tuna | East Pacific Ocean | High | data collection |
| Katsuwonus pelamis | Skipjack tuna | East Pacific Ocean | High | updating/processing of the data must be done |
| Thunnus alalunga | Albacore tuna | East Pacific Ocean | High | of the stock assessments. |
| Thunnus orientalis | Pacific bluefin tuna | East Pacific Ocean | High |  |
| Xiphias gladius | Swordfish | East Pacific Ocean | High |  |
| Makaira nigricans (or mazara) | Blue marlin | East Pacific Ocean | High |  |
| Makaira indica | Black marlin | East Pacific Ocean | High |  |
| Tetrapturus audax | Striped marlin | East Pacific Ocean | High |  |

## ICCAT

## SPECIES

When designing sampling plans aiming at collecting biological information as laid down in chapter III of this Commission decision, stock boundaries, as fixed by the competent RFMOs of RFOs, will have to be taken into account and appropriate sampling effort will be allocate to each stock.

| Scientific name | Common name | Geographical Area | Priority |  |
| :--- | :--- | :--- | :--- | :--- |
| Thunnus albacares | Yellowfin tuna | Atlantic Ocean an adjacent seas | High |  |
| Thunnus obesus | Bigeye tuna | Atlantic Ocean an adjacent seas | High |  |
| Katsuwonus pelamis | Skipjack tuna | Atlantic Ocean an adjacent seas | High | The data collection is annual <br> and <br> the |
| Thunnus alalunga | Albacore tuna | Atlantic Ocean an adjacent seas | High |  |


| Thunnus thynnus | Bluefin tuna | Atlantic Ocean an adjacent seas | High | of the data must be done timely to fit the schedule of the stock assessments. |
| :---: | :---: | :---: | :---: | :---: |
| Xiphias gladius | Swordfish | Atlantic Ocean an adjacent seas | High |  |
| Makaira nigricans (or mazara) | Blue marlin | Atlantic Ocean an adjacent seas | High |  |
| Istiophorus albicans | Sailfish | Atlantic Ocean an adjacent seas | High |  |
| Tetrapturus albidus | White marlin | Atlantic Ocean an adjacent seas | High |  |
| Prionace glauca | Blue shark | Atlantic Ocean an adjacent seas | High |  |
| Auxis rochei | Bullet tuna | Atlantic Ocean an adjacent seas | High |  |
| Sarda sarda | Atlantic bonito | Atlantic Ocean an adjacent seas | High |  |
| Euthynnus alleteratus | Atlantic back skipjack | Atlantic Ocean an adjacent seas | Medium |  |
| Thunnus atlanticus | Blackfin tuna | Atlantic Ocean an adjacent seas | Medium |  |
| Orcynopsis unicolor | Plain bonito | Atlantic Ocean an adjacent seas | Medium |  |
| Scomberomorus brasiliensis | Serra Spanish mackerel | Atlantic Ocean an adjacent seas | Medium |  |
| Scomberomorus regalis | Cero | Atlantic Ocean an adjacent seas | Medium |  |
| Auxis thazard | Frigate tuna | Atlantic Ocean an adjacent seas | Medium |  |
| Scomberomorus cavalla | King mackerel | Atlantic Ocean an adjacent seas | Medium |  |
| Scomberomorus tritor | West African Spanish mackerel | Atlantic Ocean an adjacent seas | Medium |  |
| Scomberomorus maculatus | Atlantic Spanish mackerel | Atlantic Ocean an adjacent seas | Medium |  |
| Acanthocybium solandri | Wahoo | Atlantic Ocean an adjacent seas | Medium |  |
| Coryphaena hippurus | Dolphinfish | Atlantic Ocean an adjacent seas | Medium |  |

NAFO
SPECIES
When designing sampling plans aiming at collecting biological information as laid down in chapter III of this Commission decision, stock boundaries, as fixed by the competent RFMOs of RFOs, will have to be taken into account and appropriate sampling effort will be allocate to each stock.

| Scientific name | Common name | Stocks as defined by the RFMO | Priority |
| :--- | :--- | :--- | :--- |
| Gadus morhua | Cod | NAFO 2J 3KL | Low |
| Gadus morhua | Cod | NAFO 3M | High |
| Gadus morhua | Cod | NAFO 3NO | High |
| Gadus morhua | Cod | NAFO 3Ps | High | | The data collection is annual |
| :--- |
| and |


| Gadus morhua | Cod | NAFO SA1 | High | of the data must be done timely to fit the schedule of |
| :---: | :---: | :---: | :---: | :---: |
| Glyptocephalus cynoglossus | Witch flounder | NAFO 3NO | High | the stock assessmens. |
| Glyptocephalus cynoglossus | Witch flounder | NAFO 2J3KL | Low |  |
| Hippoglossoides platessoides | American plaice | NAFO 3LNO | High |  |
| Hippoglossoides platessoides | American plaice | NAFO 3M | High |  |
| Limanda ferruginea | Yellowtail flounder | NAFO 3LNO | Medium |  |
| Coryphaenoides rupestris | Roundnose Grenadier | NAFO SA0+1 | Low |  |
| Macrourus berglax | Roughhead grenadier | NAFO SA2 +3 | High |  |
| Pandalus borealis | Northern shrimp | NAFO 3LNO | High | ) |
| Pandalus borealis | Northern shrimp | NAFO 3M | High |  |
| Amblyraja radiata | Thorny skate | NAFO 3LNOPs | High |  |
| Reinhardtius <br> hippoglossoides | Greenland halibut | NAFO 3KLMNO | High |  |
| Reinhardtius hippoglossoides | Greenland halibut | NAFO SA1 | High |  |
| Hypoglossus hippoglossuss | Atlantic halibut | NAFO SA1 | Low |  |
| Sebastes mentella | Redfish | NAFO SA1 | High |  |
| Sebastes spp. | Redfish | NAFO 3LN | High |  |
| Sebastes spp. | Redfish | NAFO 3M | High |  |
| Sebastes spp. | Redfish | NAFO 30 | High |  |
| Urophycis tenuis | White hake | NAFO 3NO | High |  |
| Mallotus villosus | Capelin | NAFO 3NO | High |  |
| Beryx sp. | Alfonsinos | NAFO 6G | High |  |
| Illex illecebrosus | Shortfin squid | NAFO Subareas $3+4$ | Low |  |
| Salmo salar | Salmon | NAFO S1+ ICES Sub-area XIV, NEAF, NASCO | High |  |

FAO marine area 34 (CECAF)

| When designing sampling plans aiming at collecting biological information as laid down in chapter III of this Commission decision, stock boundaries, as fixed by the competent RFMOs of RFOs, will have to be taken into account and appropriate sampling effort will be allocate to each stock. |  |  |  | Collection of Biological variables: |
| :---: | :---: | :---: | :---: | :---: |
| Scientific name | Common name | Geographical Area | Priority |  |
| Brachydeuterus spp. | Grunt | 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Caranx spp. | Jack | 34.3.1., 34.3.3-6. | high |  |
| Cynoglossus spp. | Tongue sole | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Decapterus spp. | Scad | 34.3.1., 34.3.3-6. | high |  |
| Dentex canariensis | Canary dentex | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | medium | is annual and the |
| Dentex congoensis | Congo dentex | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | medium | done timely to fit the schedule of the |
| Dentex macrophthalmus | Large-eye dentex | 34.1.1., 34.1.3. , 34.3.1., 34.3.3-6. | high |  |
| Dentex maroccanus | Morocco dentex | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | medium |  |
| Dentex spp. | Dentex | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Engraulis encrasicolus | Anchovy | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Epinephelus aeneus | White grouper | 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Ethmalosa fimbriata | Bonga shad | 34.3.1., 34.3.3-6. | high |  |
| Farfantepenaeus notialis | Southern pink shrimp | 34.1.1. , 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Galeoides decadactylus | Lesser African threadfin | 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Loligo vulgaris | Common squid | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Merluccius polli | Black hake | 34.1.1. , 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Merluccius senegalensis | Black hake | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high | is annual and the updating/processing |
| Merluccius spp. | Other hake | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | medium | done timely to fit the schedule of the |
| Octopus vulgaris | Common octopus | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Pagellus acarne | Red pandora | 34.1.1. | high |  |
| Pagellus bellottii | Red pandora | 34.1.1., 34.1.3., 34.3.1. , 34.3.3-6. | high |  |


| Pagellus bogaraveo | Blackspot seabream | 34.1.1. | medium |  |
| :---: | :---: | :---: | :---: | :---: |
| Pagellus spp. | Pandora | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Pagrus caeruleostictus | Blue spotted seabream | 34.1.1., 34.1.3., 34.3.1. , 34.3.3-6. | high |  |
| Parapenaeus longirostris | Deepwater rose shrimp | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Pomadasys incisus | Bastard grunt | 34.1.1. | medium |  |
| Pomadasys spp. | Grunt | 34.1.1., 34.1.3., 34.3.1. , 34.3.3-6. | high |  |
| Pseudotolithus spp. | West African croakers | 34.1.1. | high |  |
| Sardina pilchardus | Sardine | 34.1.1., 34.1.3. | high |  |
| Sardinella aurita | Round sardinella | 34.1.1., 34.1.3. , 34.3.1., 34.3.3-6. | high |  |
| Sardinella maderensis | Short-body sardinella | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high | The data collection is annual and the updating/processing of the data must be done timely to fit the schedule of the stock assessments. |
| Scomber japonicus | Chub mackerel | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Scomber spp. | Other Mackerel | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Sepia hierredda | Cuttlefish | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Sepia officinalis | Common cuttlefish | 34.1.1., 34.1.3., 34.3.1. , 34.3.3-6. | high |  |
| Sepia spp. | cuttlefishes | 34.1.1., 34.1.3. , 34.3.1., 34.3.3-6. | medium |  |
| Sparidae | Seabream | 34.1.1., 34.1.3. , 34.3.1., 34.3.3-6. | high |  |
| Sparus spp. | Seabream | 34.1.1. | high |  |
| Trachurus trachurus | Atlantic horse mackerel | 34.1.1., 34.1.3., 34.3.1., 34.3.3-6. | high |  |
| Trachurus trecae | Cunene horse mackerel | 34.1.1., 34.1.3., 34.3.1. , 34.3.3-6. | high |  |
| Umbrina canariensis | Canary drum | 34.3.3-6. | medium |  |

SEAFO

| SPECIES <br> When designing sampling plans aiming at collecting biological information as laid down in chapter III of this Commission decision, stock boundaries, as fixed by the competent RFMOs of RFOs, will have to be taken into account and appropriate sampling effort will be allocate to each stock. |  |  | Frequency of Collection of Biological variables: |
| :---: | :---: | :---: | :---: |
| Scientific name | Common name | Geographical Area | SEA |
| Dissostichus <br> eleginoides | Patagonian toothfish | South East Atlantic | Convention Area only take place a few months per year or these are |
| Beryx spp. | Alfonsinos | South East Atlantic | experimental set/haul). |


| Chaceon spp. | Red/Golden crabs | South East Atlantic | High | Biological data collection comes from the on-board observer sampling. |
| :---: | :---: | :---: | :---: | :---: |
| Pseudopentaceros richardsoni | Pelagic armourhead / Southern boarfish | South East Atlantic | High | Preliminary guidelines for data collection of the main commercial SEAFO species (SEAFO SC Report 11/2013) |
| Helicolenus spp. | Blackbelly rosefishes | South East Atlantic | High | The data collection is annual and the |
| Hoplostethus atlanticus | Orange roughy | South East Atlantic | High | the data must be done timely to fit the schedule of the stock assessments. |
| Trachurus spp | Horse mackerel | South East Atlantic | High |  |
| Scomber spp | Mackerel | South East Atlantic | High |  |
| Polyprion americanus | Wreckfish | South East Atlantic | Medium |  |
| Jasus tristani | Tristan rock lobster | South East Atlantic | Medium |  |
| Lepidotus caudatus | Silver scabbardfish | South East Atlantic | Medium |  |
| Schedophilus ovalis | Imperial Blackfish | South East Atlantic | Low |  |
| Schedophilus velaini | Violet warehou | South East Atlantic | Low |  |
| Allocyttus verucossus | Oreo dories | South East Atlantic | Low |  |
| Neocyttus romboidales |  | South East Atlantic |  |  |
| Allocyttus guineensis | - | South East Atlantic |  |  |
| Pseudocyttu smaculatus |  | South East Atlantic |  |  |
| Emmelichthys nitidus | Cape <br> Bonnetmouth | South East Atlantic | Low |  |
| Ruvettus pretiosus | Oilfish | South East Atlantic | Low |  |
| Promethichthys prometheus | Roudi escolar | South East Atlantic | Low |  |
| Macrourus spp. | Grenadiers | South East Atlantic | Low |  |
| Antimora rostrata | $\begin{aligned} & \text { Blue } \\ & \text { antimora } \end{aligned}$ | South East Atlantic | Low |  |
| Epigonus spp | Cardinal fish | South East Atlantic | Low |  |
| Merluccius spp | Hake | South East Atlantic | Low |  |
| Notopogon fernandezianus | Orange bellowfish | South East Atlantic | Low |  |


| Octopodidae and <br> Loliginidae | Octopus and <br> squids | South East Atlantic | Low |  |
| :---: | :---: | :---: | :---: | :---: |

## WCPFC

| SPECIES <br> When designing sampling plans aiming at collecting biological information as laid down in chapter III of this Commission decision, stock boundaries, as fixed by the competent RFMOs of RFOs, will have to be taken into account and appropriate sampling effort will be allocate to each stock. |  |  |  | Frequency of Collection of Biological variables: |
| :---: | :---: | :---: | :---: | :---: |
| Scientific name | Common name | Geographical Area | Priority |  |
| Thunnus albacares | Yellowfin tuna | West Central Pacific Ocean | High |  |
| Thunnus obesus | Bigeye tuna | West Central Pacific Ocean | High |  |
| Katsuwonus pelamis | Skipjack tuna | West Central Pacific Ocean | High |  |
| Thunnus alalunga | Albacore tuna | West Central Pacific Ocean | High | and the updating/processing |
| Thunnus orientalis | Pacific bluefin tuna | West Central Pacific Ocean | High | timely to fit the schedule of the stock assessments. |
| Xiphias gladius | Swordfish | West Central Pacific Ocean | High |  |
| Makaira nigricans (or mazara) | Blue marlin | West Central Pacific Ocean | High |  |
| Makaira indica | Black marlin | West Central Pacific Ocean | High |  |
| Tetrapturus audax | Striped marlin | West Central Pacific Ocean | High |  |
| Acanthocybium solandri | Wahoo | West Central Pacific Ocean | Medium |  |
| Coryphaena hippurus | Dolphinfish | West Central Pacific Ocean | Medium |  |
| Elagatis bipinnulata | Raibow runner | West Central Pacific Ocean | Medium |  |
| Lepidocybium flavobrunneum | Escolar | West Central Pacific Ocean | Medium |  |
| Lampris regius | Moonfish (opah) | West Central Pacific Ocean | Medium |  |
| Mola mola | Sunfish | West Central Pacific Ocean | Medium |  |
| Istiophorus platypterus | Sailfish | West Central Pacific Ocean | Medium |  |
| Tetrapturus angustirostris | Spearfish | West Central Pacific Ocean | Medium |  |
| Ruvettus pretiosus | Oilfish | West Central Pacific Ocean | Medium |  |
| Prionace glauca | Blue shark | West Central Pacific Ocean | High |  |
| Carcharhinus longimanus | Oceanic whitetip shark | West Central Pacific Ocean | High |  |
| Carcharhinus falciformis | Silky shark | West Central Pacific Ocean | High |  |
| Alopias superciliosus | big eye thresher | West Central Pacific Ocean | High |  |


| Alopias vulpinus | Common <br> thresher | West Central Pacific Ocean | High |
| :--- | :--- | :--- | :--- |
| Alopias pelagicus | Pelagic thresher | West Central Pacific Ocean | High |

NB: for WCPF the following reporting requirements for Long liners should be added to the relevant appendices of the DCF (Appendix VIII of 2010/93/EU):

1) Number of branch lines between floats. The number of branch lines between floats should be reported for each set.
2) Number of fish caught per set, for the following species: albacore (Thunnus alalunga), bigeye (Thunnus obesus), skipjack (Katsuwonus pelamis), yellowfin (Thunnus albacares), striped marlin (Tetrapturus audax), blue marlin (Makaira mazara), black marlin (Makaira indica) and swordfish (Xiphias gladius), blue shark, silky shark, oceanic whitetip shark, mako sharks, thresher sharks, porbeagle shark (south of $20^{\circ}$, until biological data shows this or another geographic limit to be appropriate), hammerhead sharks (winghead, scalloped, great, and smooth), whale shark, and other species as determined by the Commission.

If the total weight or average weight of fish caught per set has been recorded, then the total weight or average weight of fish caught per set, by species, should also be reported. If the total weight or average weight of fish caught per set has not been recorded, then the total weight or average weight of fish caught per set, by species, should be estimated and the estimates reported. The total weight or average weight shall refer to whole weights, rather than processed weights.

## WECAFC

SPECIES
When designing sampling plans aiming at collecting biological information as laid down in chapter III of this Commission decision, stock boundaries, as fixed by the competent RFMOs of RFOs, will have to be taken into account and appropriate sampling effort will be allocate to each stock.

| Scientific name | $\begin{aligned} & \text { Common } \\ & \text { name } \end{aligned}$ | Geographical Area | Priority | The data collection is annual and the updating/processing of the data must be done timely to fit the schedule of the stock assessments. |
| :---: | :---: | :---: | :---: | :---: |
| Panulirus argus | Caribbean <br> Spiny <br> Lobster | West Central Atlantic | High |  |
| Strombus gigas | Queen Conch | West Central Atlantic | High |  |
| Shark-like Selachii, Rajidae | Sharks, <br>  <br> skates | West Central Atlantic | High |  |
| Coryphaena hippurus | Dolphin fish | West Central Atlantic | High |  |
| Acanthocybium solandri | Wahoo | West Central Atlantic | High |  |
| Epinephelus guttatus | Red Hind | West Central Atlantic | High |  |
| Lutjanus vivanus | Silk snapper | West Central Atlantic | High |  |
| Lutjanus buccanella | Blackfin snapper | West Central Atlantic | High |  |
| Lutjanus campechanus | Red snapper | West Central Atlantic | High |  |
| Penaeus subtilis | Penaeus shrimp | French Guiana EEZ | High |  |

SPECIES
When designing sampling plans aiming at collecting biological information as laid down in chapter III of this Commission decision, stock boundaries, as fixed by the competent RFMOs of RFOs, will have to be taken into account and appropriate sampling effort will be allocate to each stock.

| Scientific name | Common name | Geographical Area | Priority |
| :---: | :---: | :---: | :---: |
| Thunnus albacares | Yellowfin tuna | Indian Ocean Western and Eastern | High |
| Thunnus obesus | Bigeye tuna | Indian Ocean Western and Eastern | High |
| Katsuwonus pelamis | Skipjack tuna | Indian Ocean Western and Eastern | High |
| Thunnus alalunga | Albacore tuna | Indian Ocean Western and Eastern | High |
| Xiphias gladius | Swordfish | Indian Ocean Western and Eastern | High |
| Makaira nigricans (or mazara) | Blue marlin | Indian Ocean Western and Eastern | High |
| Makaira indica | Black marlin | Indian Ocean Western and Eastern | High |
| Tetrapturus audax | Striped marlin | Indian Ocean Western and Eastern | High |
| Istiophorus platypterus | Indo-Pacific sailfish | Indian Ocean Western and Eastern | High |
| Auxis rochei | Bullet tuna | Indian Ocean Western and Eastern | Medium |
| Auxis thazard | Frigate tuna | Indian Ocean Western and Eastern | Medium |
| Euthynnus affinis | Kawakawa | Indian Ocean Western and Eastern | Medium |
| Thunnus tonggol | Longtail tuna | Indian Ocean Western and Eastern | Medium |
| Scomberomorus guttatus | Indo-Pacific king mackerel | Indian Ocean Western and Eastern | Medium |
| Scomberomorus commerson | Narrow-barred Spanish mackerel | Indian Ocean Western and Eastern | Medium |
| Prionace glauca | Blue shark | Indian Ocean Western and Eastern | High |
| Alopias superciliosus | Bigeye thresher shark | Indian Ocean Western and Eastern | High |
| Carcharhinus falciformes | Silky shark | Indian Ocean Western and Eastern | High |
| Carcharhinus longimanus | Oceanic whitetip shark | Indian Ocean Western and Eastern | High |
| Alopias pelagicus | Pelagic thresher shark | Indian Ocean Western and Eastern | High |
| Sphyrna lewini | Scalloped hammerhead shark | Indian Ocean Western and Eastern | High |

Frequency of Collection of Biological variables

The data collection is annual and the updating/processing of the data must be done timely to fit the schedule of the stock assessments.

Other RFMOs

| SPECIES <br> When designing sampling plans aiming at collecting biological information as laid down in chapter III of this Commission decision, stock boundaries, as fixed by the competent RFMOs of RFOs, will have to be taken into account and appropriate sampling effort will be allocate to each stock. |  |  |  | Frequency of Collection of Biological variables: |
| :---: | :---: | :---: | :---: | :---: |
| Scientific name | Common name | Geographical Area | Priority |  |
| Trachurus murphyi | Jack mackerel | SPRFMO Convention Area | High |  |
| Euphausia superba | Krill | CCAMLR Convention Area | High | The data collection is |
| Dissostichus spp. <br> Dissostichus <br> eleginoidis and Dissostichus mawsoni) | Toothfish | CCAMLR Convention Area | High | updating/processing of the data must be done timely to fit the schedule of the stock assessments. |
| Champsocephalus gunnari | Mackerel icefish | CCAMLR Convention Area | Low |  |
| Resources of fis crustaceans sedentary species competence excluding: i) sede subject to th jurisdiction of co pursuant to article 1982 UN Conven Law of the Sea, an migratory specie Annex I of the Convention on the Sea. | molluscs, other within the a, but ary species fishery tal States 7(4) of the on on the ii) highly listed in 1982 UN Law of the | SIOFA Convention Area |  |  |

## Table 1D [NEW]

List of species to be monitored because of species protection programmes in the EU or under international obligations(chapter II (1) (b) (i)

| Common name | Scientific name | Region / RFMO | Obligation type |
| :---: | :---: | :---: | :---: |
| Bony fishes | Teleostei |  |  |
| Sturgeons | Acipenser spp. | Mediterranean Sea and Black Sea | Annex II of the Barcelona Convention, Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Smoothheads (Slickheads) | Alepocephalidae | All Regions | Deep sea Regulation |
| Baird's smoothhead | Alepocephalus Bairdii | All Regions | Deep sea Regulation |
| Risso's smoothhead | Alepocephalus rostratus | All Regions | Deep sea Regulation |
| Pontic shad | Alosa immaculata | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Black Sea shad | Alosa tanaica | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| European eel | Anguilla anguilla | All Regions | ??? |
| Blue antimora (Blue hake) | Antimora rostrata | All Regions | Deep sea Regulation |
| Black scabbardfish | Aphanopus carbo | All Regions | Deep sea Regulation |
| Scabbardfish | Aphanopus intermedius | All Regions | Deep sea Regulation |
| Crayfish | Astacus spp. | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Big-scale sand smelt | Atherina pontica | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Common pochard | Aythya ferina | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Greater scaup | Aythya marila | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Garfish | Belone belone euxini Günther | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Alfonsinos | Beryx spp. | All Regions | Deep sea Regulation |
|  | Cataetyx laticeps | All Regions | Deep sea Regulation |
| Vendance | Coregonus albula | Baltic Sea | RCM Baltic recommendation |
| lumpfish | Cyclopterus lumpus | All Regions | Deep sea Regulation |
| Annular sea-bream | Diplodus annularis | Mediterranean Sea | Mediterranean Regulation 1976/2006 (min. cons. size) |
| Sharpsnout sea-bream | Diplodus puntazzo | Mediterranean Sea | Mediterranean Regulation 1976/2006 (min. cons. size) |


| White sea-bream | Diplodus sargus | Mediterranean Sea | Mediterranean Regulation 1976/2006 (min. cons. size) |
| :---: | :---: | :---: | :---: |
| Two-banded sea-bream | Diplodus vulgaris | Mediterranean Sea | Mediterranean $\quad$ Regulation 1976/2006 (min. cons. size) |
| Patagonian toothfish | Dissostichus eleginoides | All Regions | Deep sea Regulation |
| Antarctic toothfish | Dissostichus mawsoni | All Regions | Deep sea Regulation |
| Groupers | Ephinephelus spp. | Mediterranean Sea | $\begin{aligned} & \text { Mediterranean } \quad \text { Regulation } \\ & \text { 1976/2006 (min. cons. size) } \end{aligned}$ |
| Black cardinalfish | Epigonus telescopus | All Regions | Vulnerable species Deep sea Regulation |
| Gobies | Gobiidae | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Bluemouth (Bluemouth redfish) | Helicolenus dactilopterus | All Regions | Deep sea Regulation |
| Atlantic halibut | Hippoglossus hippoglossus | All Regions | Deep sea Regulation |
| Orange roughy | Hoplostethus atlanticus | All Regions | Vulnerable species Deep sea Regulation |
| Silver roughy (Pink) | Hoplosthetus mediterraneus | All Regions | Deep sea Regulation |
| Silver scabbard fish (Cutless fish) | Lepidopus caudatus | All Regions | Deep sea Regulation |
| Stripped sea-bream | Lithognathus mormyrus | Mediterranean Sea | Mediterranean Regulation 1976/2006 (min. cons. size) |
| Golden grey mullet | Liza aurata | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Leaping mullet | Liza saliens | Black Sea | Annex IV of the Black Sea <br> Biodiversity and Landscape <br> Conservation Protocol |
| Greater Eelpout | Lycodes esmarkii | All Regions | Deep sea Regulation |
| Grenadiers (rattails) other than roundnose grenadier and roughhead grenadier | Macrouridaeother than Coryphaenoides rupestris and Macrourus berglax | All Regions | Deep sea Regulation |
| Roughhead grenadier (Rough rattail) | Macrourus berglax | All Regions | Deep sea Regulation |
| Whiting | Merlangius merlangus | Baltic Sea | RCM Baltic recommendation |
| Whiting | Merlangius merlangus | Black Sea | Annex IV of the Black Sea <br> Biodiversity and Landscape <br> Conservation Protocol |
| Blue ling | Molva dypterigia | All Regions | Deep sea Regulation |
| Common mora | Mora moro | All Regions | Deep sea Regulation |
| Mullet | Mugil spp. | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Black gemfish | Nesiarchus nasutus | All Regions | Deep sea Regulation |
| Snubnosed spiny eel | Notocanthus chemnitzii | All Regions | Deep sea Regulation |
| Smelt | Osmerus eperlanus | Baltic Sea | RCM Baltic recommendation |
| Spanish sea-bream | Pagellus acarne | Mediterranean Sea | Mediterranean Regulation 1976/2006 (min. cons. size) |
| Red sea-bream | Pagellus bogaraveo | Mediterranean Sea | Mediterranean Regulation 1976/2006 (min. cons. size) |


| Common sea-bream | Pagrus pagrus | Mediterranean Sea | MediterraneanRegulation <br> 1976/2006 (min. cons. size) <br> Wreckfish <br> Polypulation americanus |
| :--- | :--- | :--- | :--- |
| Mreckfish | Mediterranean Sea | Mediterranean <br> 1976/2006 (min. cons. size) |  |
| Bluefish | Polyprion americanus | All Regions | Deep sea Regulation |
| Aomatomus saltatrix | Black Sea | Annex IV of the Black Sea <br> Biodiversity and Landscape <br> Conservation Protocol |  |
| Atlantic chub mackerel | Scomber colias Gmelin | Black Sea | Annex IV of the Black Sea <br> Biodiversity and Landscape <br> Conservation Protocol |
| Small redfish (Norway redfish) | Sebastes viviparus | All Regions | Deep sea Regulation |


| Leafscale gulper shark | Centrophorus squamosus | All oceans | RFMOs, High priority |
| :--- | :--- | :--- | :--- |
| Black dogfish | Centroscyllium fabricii | All oceans | RFMOs, High priority, Deep sea <br> Regulation |
| Portuguese dogfish | Centroscymnus coelolepis | All oceans | RFMOs, High priority, Deep sea <br> Regulation |
| Longnose velvet dogfish | Centroscymnus crepidater | All oceans | RFMOs , High priority, <br> Vulneable species Deep sea <br> Regulation |
| Basking shark | Cetorhinus maximus | All oceans | RFMOs, High priority |


|  | Leucoraja melitensis | All <br> oceans+Mediterranean <br> and Black Sea | RFMOs , High priority, <br> Barcelona Convention Annex II |
| :--- | :--- | :--- | :--- |
| Reef manta ray | Manta alfredi | All oceans | RFMOs, High priority |


| Bottlenose skate | Rostroraja alba | All oceans + Mediterranean and Black Sea | RFMOs , High priority, <br> Barcelona Convention Annex II |
| :---: | :---: | :---: | :---: |
| Knifetooth dogfish | Scymnodon ringens | All oceans | RFMOs , High priority, Deep sea Regulation |
| Other sharks | Selachimorpha (or Selachii), Batoidea (to be defined by species according to landing, survey or catch data) | All oceans | RFMOs, High priority |
| Greenland shark | Somniosus microcephalus | All oceans | RFMOs , High priority, Deep sea Regulation |
| Scalloped hammerhead | Sphyrna lewini | All oceans | RFMOs, High priority |
| Great hammerhead | Sphyrna mokarran | All oceans | RFMOs, High priority |
| Smooth hammerhead | Sphyrna zygaena | All oceans | RFMOs, High priority |
| Spurdog | Squalus acanthias | All oceans+Mediterranean and Black Sea | RFMOs , High priority, Barcelona Convention Annex III |
| Sawback angelshark | Squatina aculeata | All oceans+Mediterranean and Black Sea | RFMOs , High priority, <br> Barcelona Convention Annex II |
| Smoothback angelshark | Squatina oculata | All <br> oceans+Mediterranean and Black Sea | RFMOs , High priority, <br> Barcelona Convention Annex II |
| Angel shark | Squatina squatina | All <br> oceans+Mediterranean and Black Sea | RFMOs , High priority, <br> Barcelona Convention Annex II |
| Mammals | mammalia |  |  |
| Minke whale | Balaenoptera acutorostrata | All areas out of Med | - |
| Minke whale | Balaenoptera acutorostrata | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex II of the Barcelona Convention |
| Sei whale | Balaenoptera borealis | All areas out of Med | - |
| Sei whale | Balaenoptera borealis | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex <br> II of the Barcelona Convention |
| Fin whale | Balaenoptera physalus | All areas out of Med | - |
| Fin whale | Balaenoptera physalus | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex II of the Barcelona Convention |
| Short-beaked common dolphin | Delphinus delphis | All areas out of Med | - |
| Short-beaked common dolphin | Delphinus delphis | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex <br> II of the Barcelona Convention |
| North Atlantic right whale | Eubalaena glacialis | All areas out of Med | - |
| North Atlantic right whale | Eubalaena glacialis | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex <br> II of the Barcelona Convention |
| Long-finned pilot whale | Globicephala melas | All areas out of Med | - |
| Long-finned pilot whale | Globicephala melas | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex <br> II of the Barcelona Convention |
| Risso's dolphin | Grampus griseus | All areas out of Med | - |
| Risso's dolphin | Grampus griseus | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex <br> II of the Barcelona Convention |


| Beluga | Huso huso | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| :---: | :---: | :---: | :---: |
| Dwarf sperm whale | Kogia simus | All areas out of Med | - |
| Dwarf sperm whale | Kogia simus | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex <br> II of the Barcelona Convention |
| Kemp's ridley sea turtle | Lepidochelys kempii | Mediterranean Sea | Rec. GFCM/35/2011/4 \& Annex <br> II of the Barcelona Convention |
| Humpback whale | Megaptera novaeangliae | All areas out of Med | - |
| Humpback whale | Megaptera novaeangliae | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex <br> II of the Barcelona Convention |
| Blainville's beaked whale | Mesoplodon densirostris | All areas out of Med | - |
| Blainville's beaked whale | Mesoplodon densirostris | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex II of the Barcelona Convention |
| Monk seal | Monachus monachus | Mediterranean Sea | Rec. GFCM/35/2011/5 \& Annex II of the Barcelona Convention |
| Killer whale | Orcinus orca | All areas out of Med | - |
| Killer whale | Orcinus orca | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex <br> II of the Barcelona Convention |
| Harbour porpoise | Phocoena phocoena | All areas out of Med | - |
| Harbour porpoise | Phocoena phocoena | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex II of the Barcelona Convention |
| Sperm whale | Physeter macrocephalus | All areas out of Med | - |
| Sperm whale | Physeter macrocephalus | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex II of the Barcelona Convention |
| False killer whale | Pseudorca crassidens | All areas out of Med | - |
| False killer whale | Pseudorca crassidens | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex II of the Barcelona Convention |
| Striped dolphin | Stenella coeruleoalba | All areas out of Med | - |
| Striped dolphin | Stenella coeruleoalba | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex <br> II of the Barcelona Convention |
| Rough-toothed dolphin | Steno bredanensis | All areas out of Med | - |
| Rough-toothed dolphin | Steno bredanensis | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex II of the Barcelona Convention |
| Bottlenose dolphin | Tursiops truncatus | All areas out of Med | - |
| Bottlenose dolphin | Tursiops truncatus | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex II of the Barcelona Convention |
| Cuvier's beaked whale | Ziphius cavirostris | All areas out of Med | - |
| Cuvier's beaked whale | Ziphius cavirostris | Mediterranean Sea | Rec. GFCM/36/2012/2 \& Annex II of the Barcelona Convention |
| birds | aves |  |  |
| Cory's Shearwater | Calonectris diomedea | All areas out of Med | - |
| Cory's Shearwater | Calonectris diomedea | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex II of the Barcelona Convention |


| Eleonora's Falcon | Falco eleonorae | All areas out of Med | - |
| :---: | :---: | :---: | :---: |
| Eleonora's Falcon | Falco eleonorae | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| European Storm Petrel | Hydrobates pelagicus | All areas out of Med | - |
| European Storm Petrel | Hydrobates pelagicus | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| Audouin's Gull | Larus audouinii | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| Slender-billed Curlew | Numenius tenuirostris | All areas out of Med | - |
| Slender-billed Curlew | Numenius tenuirostris | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| Osprey | Pandion haliaetus | All areas out of Med | - |
| Osprey | Pandion haliaetus | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| Dalmatian Pelican | Pelecanus crispus | All areas out of Med | - |
| Dalmatian Pelican | Pelecanus crispus | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| Great White Pelican | Pelecanus onocrotalus | All areas out of Med | - |
| Great White Pelican | Pelecanus onocrotalus | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| Great Cormorant | Phalacracorax carbo | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| European Shag | Phalacrocorax aristotelis | All areas out of Med | - |
| European Shag | Phalacrocorax aristotelis | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex II of the Barcelona Convention |
| Pygmy Cormorant | Phalacrocorax pygmaeus | All areas out of Med | - |
| Pygmy Cormorant | Phalacrocorax pygmaeus | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| American Flamingo | Phoenicopterus ruber | All areas out of Med | - |
| American Flamingo | Phoenicopterus ruber | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| Yelkouan Shearwater | Puffinus yelkouan | All areas out of Med | - |
| Yelkouan Shearwater | Puffinus yelkouan | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| Little Tern | Sterna albifrons | All areas out of Med | - |
| Little Tern | Sterna albifrons | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex II of the Barcelona Convention |
| Lesser Crested Tern | Sterna bengalensis | All areas out of Med | - |
| Lesser Crested Tern | Sterna bengalensis | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex <br> II of the Barcelona Convention |
| Sandwich Tern | Sterna sandvicensis | All areas out of Med | - |
| Sandwich Tern | Sterna sandvicensis | Mediterranean Sea | Rec. GFCM/35/2011/3 \& Annex II of the Barcelona Convention |


| Reptiles | Reptilia |  |  |
| :---: | :---: | :---: | :---: |
| Leggerhead turtle | Caretta caretta | Mediterranean Sea | Rec. GFCM/35/2011/4 \& Annex II of the Barcelona Convention |
| Green turtle | Chelonia mydas | All areas out of Med | - |
| Green turtle | Chelonia mydas | Mediterranean Sea | Rec. GFCM/35/2011/4 \& Annex <br> II of the Barcelona Convention |
| Leatherback turtle | Dermochelys coriacea | All areas out of Med | - |
| Leatherback turtle | Dermochelys coriacea | Mediterranean Sea | Rec. GFCM/35/2011/4 \& Annex <br> II of the Barcelona Convention |
| Hawksbill sea turtle | Eretmochelys imbricata | All areas out of Med | - |
| Hawksbill sea turtle | Eretmochelys imbricata | Mediterranean Sea | Rec. GFCM/35/2011/4 \& Annex <br> II of the Barcelona Convention |
| Kemp's ridley sea turtle | Lepidochelys kempii | - | - |
| Nile soft-shelled turtle | Trionyx triunguis | All areas out of Med | - |
| Nile soft-shelled turtle | Trionyx triunguis | Mediterranean Sea | Rec. GFCM/35/2011/4 \& Annex II of the Barcelona Convention |
| Molluscs | Mollusca |  |  |
| Striped venus | Chamellea gallina | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Banded wedge shell | Donacilla cornea | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Eledone especies | Eledone spp. | - | - |
| Lobster | Homarus gammarus | Mediterranean Sea | Mediterranean Regulation 1976/2006 (min. cons. size) |
| Mediterranean mussel | Mytilus galloprovincialis | All areas out of Med | - |
| Mediterranean mussel | Mytilus galloprovincialis | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Patella | Patella spp. | All areas out of Med | - |
| Patella | Patella spp. | Mediterranean Sea | Annex II of the Barcelona Convention |
| Rapa whelk | Rapana venosa | Black Sea | DCF \& Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Crustaceans | Crustacea |  |  |
| Deep-water red crab | Chaceon (Geryon) affinis | All Regions | Deep sea Regulation |
| Brown shrimp | Crangon crangon | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Baltic prawn | Palaemon adspersus | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |
| Rockpool prawn | Palaemon alegans | Black Sea | Annex IV of the Black Sea Biodiversity and Landscape Conservation Protocol |


| Crawfish | Palinuridae | Mediterranean Sea | Mediterranean <br> $1976 / 2006$ (min. cons. sege) |
| :--- | :--- | :--- | :--- |
|  | cnidaria |  |  |
| Red coral | Corallium rubrum | Mediterranean Sea | Rec. GFCM/36/2012/1 \& Rec. <br> GFCM/35/2011/2 |
|  |  |  |  |

## Footnote:

(e) When designing sampling plans aiming at collecting biological information as laid down in chapter III of this Commission decision, stock boundaries, as fixed by the competent RFMOs of RFOs, will have to be taken into account and appropriate sampling effort will be allocate to each stock.
for prohibited species: only individuals captured dead should be used. They should be discarded after the measurements, The data collection is annual and the updating/processing of the data must be done timely to fit the schedule of the stock assessments.

## Table 2

List of anadromous and catadromous species for which biological variables shall be collected, also forincluding the freshwater part of their lifecycle
$\begin{array}{|l|l|l|}\hline \text { Species } \\ \text { (common name) }\end{array}$ Species (Scientific name) $\left.\begin{array}{l}\text { Area where the Stock is } \\ \text { located/stock code }\end{array}\right\}$

Table 3 [former Appendix IV]

Fishing activity (metier) by Region

| Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | LOA classes (m) (d) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Activity | $\begin{aligned} & \frac{\text { Gear }}{\text { classes }} \end{aligned}$ | Gear groups | Gear type | $\frac{\text { Target assemblage }}{\underline{(a)}}$ |  | $\stackrel{e}{v}$ |  | $\begin{aligned} & \infty \\ & \stackrel{a}{v} \\ & \underset{\sim}{u} \end{aligned}$ | N | ¢ | $\stackrel{+}{ \pm}$ |
|  | Dredges | Dredges | Boat dredge [DRB] | Anadromous species (ANA) <br> Catadromous species (CAT) | (b) | - | - | - | - | - | - |
|  |  |  | Mechanised / Suction dredge [HMD] |  | (b) | - | - | - | - | - | - |
|  | Trawls | Bottom trawls | $\begin{aligned} & \hline \text { Bottom otter } \\ & \underline{\text { trawl [OTB] }} \\ & \hline \end{aligned}$ | Crustaceans (CRU) <br> Demersal species (DEF) | (b) | - | - | - | - | - | - |
|  |  |  | Multi-rig otter trawl [OTT] |  | (b) | - | - | - | - | - | - |
|  |  |  | Bottom pair trawl [PTB] | (DWS) <br> Finfish (FIF) <br> Freshwater species code needed) | (b) | - | - | - | - | - | - |
|  |  |  | $\begin{aligned} & \hline \text { Beam trawl } \\ & \hline \text { [TBB] } \end{aligned}$ |  | (b) | - | - | - | - | - | - |


|  |  | Pelagic trawls | Midwater otter trawl [OTM] | Miscellaneous (MIS) <br> Mixed Cephalopod | (b) | - | - | - | - | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Pelagic traws | Midwater pair trawl [PTM] | and Demersal (MCF) Mixed Crustaceans | (b) | - | - | - | - | - | - |
|  |  | Rods and Lines | Hand and Pole <br> lines [LHP] <br> LHM] | and Demersal <br> (MCD) <br> Mixed Deep-water | (b) | - | - | - | - |  | - |
|  | Hooks |  | Trolling lines [LTL] | species and Demersal (MDD) | (b) | - | - | - | - |  |  |
|  | and Lines | Longlines | Drifting longlines [LLD] | Mixed Pelagic and Demersal (MPD) Molluscs (MOL) | (b) | - | - | - | - |  |  |
|  |  |  | Set longlines [LLS] | Large Pelagic fish $(\mathrm{LPF})$ | (b) | - | - | - | - |  | - |
|  |  |  | $\begin{aligned} & \hline \text { Pots and Traps } \\ & \hline \text { [FPO] } \\ & \hline \end{aligned}$ | (SPF) | (b) |  | - |  |  |  |  |
|  |  |  | Fyke nets [FYK] | Large Pelagic fish | (b) | - | - | - | - |  |  |
|  | Traps | Traps | Stationary uncovered pound nets [FPN] | Small Pelagic fish (SPF) | (b) |  |  |  |  |  |  |
|  |  |  | Fixed installations for fences and weirs (code needed) |  | (b) | - | - | - | - | - |  |
|  |  |  | $\begin{array}{\|l\|} \hline \text { Trammel net } \\ \hline[\text { GTR }] \\ \hline \end{array}$ |  | (b) | - | - | - | - |  |  |
|  | Nets | Nets | $\begin{aligned} & \hline \text { Set gillnet } \\ & \hline \text { [GNS] } \end{aligned}$ |  | (b) | - | - | - | - | - | - |
|  |  |  | Driftnet [GND] |  | (b) | - | - | - | - | - | - |
|  |  | Surrounding | Purse seine [PS] |  | (b) | - | - | - | - | - | - |
|  |  | nets | Lampara nets [LA] |  | (b) | - | - | - | - | - | - |
|  |  |  | Fly shooting Seine [SSC] |  | (b) | - | - | - | - | - | - |
|  | Seines |  | Anchored seine [SDN] |  | (b) | - | - | - | - | - |  |
|  |  | $\underline{\text { Seines }}$ | $\begin{array}{\|l\|} \hline \text { Pair seine } \\ \hline \text { [SPR] } \\ \hline \end{array}$ |  | (b) | - | - | - | - | - | - |
|  |  |  | Beach and boat seine [SB] [SV] |  | (b) | - | - | - | - | - |  |
|  | $\frac{\text { Other }}{\text { gear }}$ | Other gear | Glass eel fishing (code neeed) | Glass eel | (b) | - | - | - | - | - |  |
|  | Misc. <br> (Specify) | Misc. (Specify) | - | - | (b) | - | - | - | - | - | - |
| $\begin{aligned} & \hline \text { Other acti } \\ & \text { fishing } \\ & \hline \end{aligned}$ | ity than |  |  | Other activity than fishing | - | - | - | - | - | - |  |
| Inactive | - | - | - | Inactive |  |  |  |  |  |  |  |

## Footnotes:

(a) according to existing coding in relevant Regulations
(b) according to existing coding in relevant Regulations

Comment [A12]: Combination of these 2 groups to be included as they define a specific metier in the MED

Table 4
Species to be collected for recreational fisheries

|  | Area | Species |
| :---: | :---: | :---: |
| 1 | Baltic Sea (ICES Subdivisions 22-32 | Salmon, eels and seatrout (including in freshwater)_-Flounder-and cod. |
| 2 | North Sea (ICES areas IIIa, IV and VIId) | Salmon and eels (including in fresh water). Seabass, cod, pollack and elasmobranchs |
| 3 | Eastern Arctic (ICES areas I and II) | Salmon and eels (including in fresh water). Cod, pollack and elasmobranchs |
| 4 | North Atlantic (ICES areas V-XIV and NAFO areas) | Salmon and eels (including in fresh water). Seabass, cod, pollack, elasmobranchs and highly migratory ICCAT species. |
| 5 | Mediterranean Sea | Eels (including in fresh water), seabass, seabream, elasmobranchs and highly migratory ICCAT species. FINAL SPECIES LIST NEEDS TO BE AGREED WITH LOCAL EXPERTS |
| 6 | Black Sea | FINAL SPECIES LIST NEEDS TO BE AGREED WITH LOCAL EXPERTS <br> Suggestions: <br> - Mugilidae <br> - Flathead grey mullet: Mugil cephalus; <br> - Golden grey mullet Liza aurata; <br> - Leaping mullet Liza saliens); <br> - Gobidae <br> - Round goby Neogobius melanostomus; <br> - Knout goby Mesogobius batrachocephalus; <br> - Black goby Gobius niger; <br> - Pinchuk's Goby Ponticola cephalargoides;etc); <br> - Mediteranean Horse mackerel Trachurus mediterraneus <br> - Bluefish Pomatomus saltatrix; <br> - Garfish Belone belone |

Table 5 [former Appendix VIII]
List of fishing activity variables

| Heading | Variables (1) | Unit |
| :---: | :---: | :---: |
| Capacity |  |  |
|  | Number of vessels | Number |
|  | GT, kW, Vessel Age | Number |
| Effort |  |  |
|  |  |  |
|  | Days at sea | Days |
|  | Hours fished (optional) | Hours |
|  | Fishing days | Days |
|  | kW * Fishing Days | Number |
|  | GT * Fishing days | Number |
|  | Number of trips | Number |
|  |  |  |
|  | Number of fishing operations | Number |
|  | Number of nets / Length (2) | Number/meters |
|  | Number of hooks, Number of lines (2) | Number |
|  | Numbers of pots, traps (2) | Number |
|  |  |  |
| Landings |  |  |
|  | Value of landings total and per commercial species | Euro |
|  | Live Weight of landings total and per species | Tonnes |
|  | Prices by commercial species | Euro/kg |
|  |  |  |

## Footnotes

1. All variables to be reported at the aggregation level (metiers and fleet segment) specified in Table 3 and Table 6a. and by Sub-region/Fishing ground as specified in table 6b
2. Collection of these variables for vessels less than 10 meters to be agreed at regional level

Vessel register information

| Name of zone | Select to be included in the <br> transversal data file |
| :--- | :---: |
| Country of registration | $\checkmark$ |
| CFR | $\checkmark$ |
| Date of event (3) | $\checkmark$ |
| Registration number | $\checkmark$ |
| Name of vessel | $\checkmark$ |
| Port of registration | $\checkmark$ |
| VMS indicator | $\checkmark$ |
| Main fishing gear | $\checkmark$ |
| Subsidiary fishing gear | $\checkmark$ |
| LOA | $\checkmark$ |
| Tonnage GT | $\checkmark$ |
| Power of main engine | $\checkmark$ |
| Power of auxiliary engine | $V$ |
| Year of construction | $V$ |

Logbook information

| Name of the data element $(M=$ Mandatory $)(O=O p t i o n a l)(C I F=$ Compulsory if applicable $)$ | Select to be included in the transversal data file |
| :---: | :---: |
| CFR number (M) | $\checkmark$ |
| External identification (M) | $\checkmark$ |
| Date, time and port of departure (M) | $\checkmark$ |
| Date, time and port of return (M) | $\checkmark$ |
| Gear type (M) | $\checkmark$ |
| Mesh size (M) | $\checkmark$ |
| Gear dimension (M) | $\checkmark$ |
| Attachments fitted (O) | $\checkmark$ |
| Date (M) | $\checkmark$ |
| Number of fishing operations (M) | $\checkmark$ |
| Fishing time ( O ) | $v$ |
| Fishing operation reference number (if applicable) ( O ) | $\checkmark$ |
| Date (O) | $\sqrt{ }$ |
| Time of start of operation (O) | $\checkmark$ |
| Finish time of operation (O) | $\sqrt{ }$ |
| Position of start of operation (O) | $\checkmark$ |
| Depth at start (O) | $\sqrt{ }$ |
| Depth at end of operation ( O ) | $\checkmark$ |
| Position at end of operation (O) | $\checkmark$ |
| Relevant geographical Area | $\checkmark$ |
| Statistical rectangle | $\checkmark$ |
| Third country fishing zone | $\checkmark$ |
| Catches caught and kept on board (M). Minimum conservation reference size | $\checkmark$ |
| Catches caught and kept on board $(M)$. Below the minimum conservation reference size. | $\checkmark$ |
| Estimates of discards (M) | $\checkmark$ |
| Catches, incidental by-catches and release of other marine organisms or animals (M) | $v$ |

Landing declaration information

| Name of the data element (M = Mandatory) | Select to be included in the <br> transversal data file |
| :--- | :---: |
| CFR (M) | $\checkmark$ |
| Port of landing $(M)$ | $V$ |
| date of landing $(M)$ | $V$ |
| Species identification (M) | $V$ |
| Relevant geographical area (M) | $V$ |
| Type of product presentation $(M)$ | $V$ |
| Volume of landing $(M)$ | $V$ |
| Presentation $(M)$ | $V$ |

## Sales notes information

| Name of the data element ( $M=$ Mandatory) ( $O=O$ Optional $)$ | Select to be included in the transversal data file |
| :---: | :---: |
| CFR (M) | $\checkmark$ |
| Port of landing (M) | $\checkmark$ |
| Date of landing (M) | $\checkmark$ |
| Species identification (M) | $\checkmark$ |
| Relevant geographical area (M) | $\checkmark$ |
| Type of product presentation (O) | $\checkmark$ |
| Individual size/weight ( $\mathbf{O}$ ) | $\checkmark$ |
| Grade ( O ) | $\checkmark$ |
| Presentation (M) | $\checkmark$ |
| Price (M) | v |

## VMS information

| Name of the data element (M = Mandatory) | Select to be included in the <br> transversal data file |
| :--- | :---: |
| CFR |  |
| Date (Year, month and date of transmission) (M) | $\checkmark$ |
| Time of transmission (M) | $\checkmark$ |
| Latitude (decimal) (M) | $V$ |
| Longitude (decimal) (M) | $V$ |
| Speed (M) | $\checkmark$ |
| Course (M) | $\checkmark$ |

Table 6 [former Appendix VI]

## List of Economic variables for the fleet



| Fleet | Number | Number |
| :--- | :--- | :---: |
|  | Mean LOA | Metres |
|  | Total vessel's tonnage | GT |
|  | Total vessel's power | kW |
|  | Mean age | Years |
| Effort | Days at sea | Days |
|  | Energy consumption | Litres |
|  | Number of fishing enterprises/units | Number |
|  | Value of landings per species | Euro |
|  | Average price per species | Euro/kg |

Table 6a [former Appendix III]
Fleet segmentation by Region

|  |  | Length classes (LOA) ${ }^{1}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Active Vessels |  | $\begin{aligned} & 0-<10 \mathrm{~m} \\ & 0-<6 \mathrm{~m} \\ & \hline \end{aligned}$ | $\begin{aligned} & 10-<12 \mathrm{~m} \\ & 6-<12 \mathrm{~m} \\ & \hline \end{aligned}$ | 12-<18 m | 18-<24 m | 24-<40 m | $\begin{aligned} & \hline 40 \mathrm{~m} \text { or } \\ & \text { larger } \\ & \hline \end{aligned}$ |
| Using "Active" gears | Beam trawlers |  |  |  |  |  |  |
|  | Demersal trawlers and/or demersal seiners |  |  |  |  |  |  |
|  | Pelagic trawlers |  |  |  |  |  |  |
|  | Purse seiners |  |  |  |  |  |  |
|  | Dredgers |  |  |  |  |  |  |
|  | Vessel using other active gears |  |  |  |  |  |  |
|  | Vessels using Polyvalent "active" gears only |  |  |  |  |  |  |
| Using "Passive" gears | Vessels using hooks | 2 | $2 \quad 2$ |  |  |  |  |
|  | Drift and/or fixed netters |  |  |  |  |  |  |
|  | Vessels using Pots and/or traps |  |  |  |  |  |  |
|  | Vessels using other Passive gears |  |  |  |  |  |  |
|  | Vessels using Polyvalent "passive" gears only |  |  |  |  |  |  |
| Using Polyvalent gears | Vessels using active and passive gears |  |  |  |  |  |  |
| Inactive vessels |  |  |  |  |  |  |  |

## Footnotes:

1. For vessels less than 12 metres in the Mediterranean Sea and the Black sea , the length categories are $0-<6,6-<12$ metres. For all other regions, the length categories are defined as $0-<10,10-<12$ metres.
8.9. Vessels less than 12 metres using passive gears in the Mediterranean Sea and the Black Sea may be disaggregated by gear type.

Table 6b [former Appendix II]
Geographical stratification by Region

| Sub-region/Fishing ground | Region | Supra region |
| :---: | :---: | :---: |
| I | II | III |
| Cluster of spatial units on level 3 as defined in Appendix I (NAFO Division) | NAFO (FAO area 21) | Baltic Sea; North sea; Eastern Arctic; NAFO; Extended North Western waters (Ices areas V, VI and VII) and Southern Western waters |
| Cluster of spatial units on level 4 as defined in Appendix I (ICES subdivision) | Baltic Sea (ICES areas III b-d) |  |
| Cluster of spatial units on level 3 as defined in Appendix I (ICES Division) | North Sea (ICES areas IIIa and IV) and Eastern Arctic (ICES areas I and II) |  |
|  | North Western waters (ICES areas Vb (only Union waters), VI and VII) |  |
|  | Non EU North Western waters (ICES areas Va and Vb (only non-Union waters)) |  |
| Cluster of spatial units on level 3 as defined in Appendix I (ICES/CECAF Division) | Southern Western waters (ICES zones VIII, IX and X (waters around Azores), and CECAF areas 34.1.1, 34.1.2 and 34.2.0 (waters around Madeira and the Canary Islands)) |  |
| Cluster of spatial units on level 4 as defined in Appendix I (GSA) | Mediterranean Sea (Maritime Waters of the Mediterranean to the East of line $5^{\circ} 36^{\prime}$ West) and Black Sea (GFCM geographical sub-area as defined in Resolution FCM/33/2009/2) | Mediterranean Sea and Black Sea |
| RFMO's sampling Sub-areas (except GFCM) | Other regions where fisheries are operated by EU vessels and managed by RFMO's to which the Community is contracting party or observer (e.g. ICCAT, IOTC, CECAF...) | Other Regions. (eventually separate between EU and non-EU waters) |

## Table 7

Social variables on the fleet, aquaculture $\&$ processing sectors

| $\begin{array}{l}\text { Variable } \\ \text { group }\end{array}$ | Variable | Unit | $\begin{array}{l}\text { Mandatory/ } \\ \text { Optional }\end{array}$ |
| :--- | :--- | :--- | :--- |
| $\begin{array}{l}\text { Social } \\ \text { variables } \\ \text { (Every 3 } \\ \text { years) }\end{array}$ | $\begin{array}{l}\text { Employment by } \\ \text { gender }\end{array}$ | $\begin{array}{l}\text { Unpaid labour by } \\ \text { gender 1 }\end{array}$ | Number |$]$ M | Mumber |
| :---: |

Footnotes:

1. Only for aquaculture and processing sectors

Table 8 [former Appendix X] Economic variables for the aquaculture sector

| Variable group | Variable ${ }^{1}$ | Unit |
| :---: | :---: | :---: |
| ECONOMIC VARIABLES |  |  |
| Income/ | Gross value of sales per species | Euro |
|  | Other income | Euro |
| Personnel costs | Personnel costs | Euro |
|  | Value of unpaid labour | Euro |
| Energy costs | Energy costs | Euro |
| Raw material costs | Livestock costs | Euro |
|  | Feed costs | Euro |
| Repair and maintenance | Repair and maintenance | Euro |
| Other operating costs | Other operating costs | Euro |
| Subsidies | Operating subsidies | $\begin{aligned} & \text { Euro } \\ & \text { Euro } \end{aligned}$ |
|  | Subsidies on investments |  |
| Capital costs | Consumption of fixed capital | Euro |
| Capital value | Total value of assets | Euro |
| Financial results | Financial income | Euro |
|  | Financial expenditures | Euro |
| Investments | Net Investments | Euro |
| Debt | Debt | Euro |
|  |  |  |
|  | , |  |
| Raw material weight | Livestock used | kg |
|  | Fish Feed used | kg |
| Weight of sales | Weight of sales per species | Kg |
| Employment | Number of persons employed | Number |
|  | Unpaid labour | Number |
|  | FTE National | Number |
|  | Number of hours worked by employees and unpaid workers | Hours |
| Number of enterprises | Number of enterprises (by category on the number of persons employed) | Number |

Table 9 NOT EVALUATED
Environmental performance variables for the aquaculture sector

| Variable group | Variable | Specification | Unit |
| :--- | :--- | :--- | :--- |
| Sustainability data | Medicines or treatments <br> administered ${ }^{16}$ | By type | Gram |
|  | Mortalities $^{17}$ |  | Tons |

Table 10 [former Appendix XI] Segmentation to be applied for the collection of aquaculture data

|  | Fish farming techniques |  |  |  |  |  |  | Hatcheri | Shellfish farming techniques |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Pon } \\ \text { ds } \end{gathered}$ | $\begin{gathered} \text { Tan } \\ \text { ks } \\ \text { and } \\ \text { race } \\ \text { way } \\ \text { s } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Ecl } \\ \text { osu } \\ \text { res } \\ \text { and } \\ \text { pen } \\ \hline \end{gathered}$ | Rec ircu lati on syst ems | $\begin{array}{\|l} \hline \text { Oth } \\ \text { er } \\ \text { met } \\ \text { hod } \\ \text { s } \end{array}$ | $\begin{aligned} & \mathrm{Cag} \\ & \text { es } \end{aligned}$ | All methods |  | Off-bottom |  | On-bottom | Other | Comment [A14]: Included, was missing. EUROSTAT also contains this variable |
|  |  |  |  |  |  |  |  |  | Rafts | $\begin{aligned} & \text { Long } \\ & \text { line } \end{aligned}$ |  |  |  |
| Salmon |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Trout |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sea bass \& Sea bream |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Carp |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tuna |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Eel |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Eggs for <br> human <br> consumption |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Comment [A15]: Was replaced from |
| $\begin{aligned} & \text { Other fresh } \\ & \text { water fish } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  | method section to the species/product section |
| Other marine fish |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mussel |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oyster |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Clam |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Crustaceans |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other molluscs |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Other shellfish |  |  |  |  |  |  |  |  |  |  |  |  | Comment [A16]: Added, was missing |
| Other aquatic organisms |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Multispecies ${ }^{\text {e }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Comment [A17]: Renamed to Multispecies due to the duplication of variable defined in the method section. |
| Seaweeds |  |  |  | - |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Comment [A18]: Replaced to the end of table |  |

Table 11 [former Appendix XII]:
List of economic variables for the processing industry sector

| Variable group | Variable ${ }^{1}$ | Unit |
| :---: | :---: | :---: |
| ECONOMIC VARIABLES |  |  |
| Income | Turnover (1) | Euro |
|  | Subsidies | Eure |
|  | Other income | Euro |
| Personnel Costs | Personnel costs | Euro |
|  | Value of unpaid labour | Euro |
|  | Payment for external agency workers (optional) | Euro |
| Energy costs | Energy costs | Euro |
| Raw material costs | Purchase of fish and other raw material for production | Euro |
| Other operational costs | Other operational costs | Euro |
| Subsidies | Operating subsidies | Euro |
|  | Subsidies on investments | Euro |
| Capital costs | Consumption of fixed capital | Euro |
| Capital value | Total value of assets | Euro |
| Financial results | Financial income | Euro |
|  | Financial expenditures | Euro |
| Extraordinary costs, net | Extraordinary costs, net | Eure |
| Investments | Net Investments | Euro |
| Debt | Debt | Euro |
| Employment | Number of persons employed | Number |
|  | FTE National | Number |
|  | Unpaid labour | Number |
|  | Number of hours worked by employees and unpaid workers | Number |
| Number of enterprises | Number of enterprises (1) | Number |
| weight of raw material (OPTIONAL) | weight of raw material per species and origin (OPTIONAL) | Kg |

Table 12 [former Appendix IX]
List of research surveys at sea


Baltic Sea (ICES areas IIIb-d)

| Baltic International Trawl Survey | BITS Q1 <br> BITS Q4 | IIIaS, IIIb-d | $1^{\text {st }}$ and 4th Quarter | Cod and other demersal <br> species |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Baltic International Acoustic <br> Survey (Autumn) | BIAS | IIIa, IIIb-d | Sep-Oct | Herring and sprat |  |
| Gulf of Riga Acoustic Herring <br> Survey | GRAHS | IIId | $3^{\text {rd }}$ Quarter | Herring |  |
| Sprat Acoustic Survey | SPRAS | IIId | May | Sprat and herring |  |
| Rügen Herring Larvae Survey | RHLS | IIId | March-June | Herring |  |

North Sea (ICES areas IIIa, IV and VIId) and Eastern Arctic (ICES areas I and II)

| International Bottom Trawl Survey | $\begin{aligned} & \hline \text { IBTS Q1 } \\ & \text { IBTS Q3 } \end{aligned}$ | IIIa, IV | 1 st and $3{ }^{\text {rd }}$ Quarter | Haddock, Cod, Saithe, Herring, Sprat, Whiting, Mackerel, Norway pout. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| North Sea Beam Trawl Survey | BTS | IVb,IVc, VIId | 3rd Quarter | Plaice, Sole |  |
| Demersal Young Fish Survey | DYFS | Coasts of NS | $3{ }^{\text {rd }}$ and4th Quarter | Plaice, sole, brown shrimp |  |
| Sole Net Survey | SNS | IVb, IVc | 3rd Quarter | Sole, Plaice |  |
| North Sea Sandeels Survey | NSSS | IVa, IVb | $4^{\text {th }}$ Quarter | Sandeels |  |
| International Ecosystem Survey in the Nordic Seas | ASH | IIa | May | Herring, Blue whiting |  |
| Redfish Survey in the Norwegian Sea and adjacent waters | REDNOR | II | August- September | Redfish |  |
| Mackerel egg Survey (Triennial) | NSMEGS | IV | May-July | Mackerel egg production |  |
| Herring Larvae survey | IHLS | IV,VIId | $1^{\text {st }}$ and $3^{\text {rd }}$ Quarter | Herring, Sprat Larvae |  |
| NS Herring Acoustic Survey | NHAS | IIIa, IV,VIa | June, July | Herring, Sprat |  |
| Nephrops TVsurvey <br> (FU 3\&4) | NTV3\&4 | IIIA | $2^{\text {nd }}$ or $3^{\text {rd }}$ Quarter | Nephrops |  |
| Nephrops TVsurvey (FU 6) | NTV6 | IVb | September | Nephrops |  |
| Nephrops TVsurvey (FU 7) | NTV7 | IVa | $2^{\text {nd }}$ or $3^{\text {rd }}$ Quarter | Nephrops |  |
| Nephrops TVsurvey (FU 8) | NTV8 | IVb | $2^{\text {nd }}$ or $3^{\text {rd }}$ Quarter | Nephrops |  |
| Nephrops TVsurvey (FU 9) | NTV9 | IVa | $2^{\text {nd }}$ or $3^{\text {rd }}$ Quarter | Nephrops |  |
| North Atlantic (ICES Areas V-XIV and NAFO areas) |  |  |  |  |  |
| International Redfish Trawl and Acoustic Survey (Biennial) | REDTAS | $\begin{aligned} & \hline \text { Va, XII, XIV; } \\ & \text { NAFO SA 1-3 } \end{aligned}$ | June/July | Redfish |  |
| Flemish Cap Groundfish survey | FCGS | 3M | July | Demersal species |  |
| Greenland Groundfish survey | GGS | XIV, NAFO SA1 | October/November | Cod, redfish and other demersal species |  |
| 3LNO Groundfish survey | PLATUXA | 3LNO | $2^{\text {nd }}$ and $3{ }^{\text {rd }}$ Quarter | Demersal species |  |



9 ANNEX 2 - Draft Work Plan Decision with "Track changes" by the EWG 16-01

## COMMISSION IMPLEMENTING DECISION

> of XXX
laying down rules on procedures, format and timetables for the submission of work plans for data collection

THE EUROPEAN COMMISSION,

## HAS ADOPTED THIS DECISION:

Article 1

## Presentation of the content of Work Plans

The content of work plans for data collection for the period 2017 and beyond, as referred to in Article 21 of Regulation (EU) No 508/2014, shall be presented in accordance with the model set out in the Annex to this Decision.

## Article 2

This Decision shall enter into force on the day following that of its publication in the Official Journal of the European Union.
This Decision shall be binding in its entirety and directly applicable in all Member States.
Done at Brussels,

## Model for national work plan for data collection

## Chapter 1

## Contents

1. Member States' work plans shall comprise of descriptions of 7 sections-contain descriptions ofing:
a) data to be collected in accordance with the new multi-annual Union programme taking into account the data needs of relevant end-users needs-of scientific data, including other appropriate scientific advisory bodies as referred to in Article 26 of Regulation (EU) 1380/2013 (Chapter 2);
b) the temporal and spatial distribution and the frequency by which the data will be collected (Chapter 3);
c) the source of the data, the procedures and methods to collect and process the data into the data sets that will be provided to end-users (Chapter 4);
d) the quality assurance and quality control framework to ensure adequate quality of the data (Chapter 5);
e) how and when the data will be available, taking into account the needs defined by the endusers of scientific advice (Chapter 6);
f) the international and regional cooperation and coordination arrangements, including bilateral and multilateral agreements concluded to achieve the objectives of this Regulation (Chapter 7); and
g) how the international obligations of the Union and its Member States have been taken into account (Chapter 8).
2. The contents and format of the above descripsections shall follow the requirements set out in Chapters 2 to 8 .

## Chapter 2

## Data to be collected in accordance with the new multi-annual Union programme

In accordance with Chapter 2 of the multi-annual Union programme, Member States shall establish sampling plans based on statistically robust principles (statistical soumd sampling schemes)for the collection of data. In recognition of the existing EU MAP and transition times
required by Member States, quota based sampling plans based on "metiers" may persist. The statistical methods used for sampling should be agreed at regional level by the relevant Regional Coordination Groups.

For commercial fisheries, the sampling schemes shall encompass the total landings into the Member State and fishing activities of vessels operating under the flag of the Member State. To that end, Tables 1 and 2 are describing the landing locations and flag fleet summaries are informative as to the sampling frame population.
Member States shall establish the data to be collected amonst the following sets:

1. Data to support assessment of the state of exploited marine resourses and the level of fishing, stocks by Union commercial fisheries in Union and outside Union waters and by recreational fisheries in Union waters. These data consist of:
a) Data on catch quantities by species (Table 3) and biological data from individual specimens (Tables 4 and 5 ) enabling the estimation of:
i. volume and length frequency of all catch fractions by stock,
ii. volume of catch and releases of recreational fisheries for the relevant species as listed in Table 4 of the EU MAP or if requested by end-users for providing advice for the management of the CFP. This should be sumamrised as defined in Table 11.
iii. mean-weight and age distribution of relevant stocks.
iv. sex-ratio, maturity ogives and fecundity data for relevant stocks from commercial catches where necessesary and where possible needed by the enduser and agreed in the Regional Coordination Groups.
2. Biological data on stocks caught or by-caught, including discards, by Union commercial fisheries in Union and outside Union waters and by recreational fisheries in Union waters:
(a) stock related variables [Tables 13 〕containing information for individual specimens en age, length, weight, sex, maturity and fecundity.
(b) catch quantities by species and type of fisheries enabling the estimation of (i) quarterly length distribution of species in the catches, (ii) quarterly volume of catch fractions (including discards) and (iii) quarterly volume of catch of recreational fisheries [Tables 4-6]
3. For anadromous and catadromous species, as indicated in Table 2 of the EU MAP:
a) stock-related biological variables (for individual specimens, on age, length, weight, sex, and fecundity, by life stage, but further specified on a species and regional basis), and annual catch quantities by age class or life stage, caught by commercial and recreational fisheries, including during the freshwater part of their lifecycle (Table 12a).
b) In addition, in at least one Eel Index River basin per Eel Management Unit, information (e.g. data, estimates, relative trends, etc.) should be annually collected on the abundance of recruits, the abundance of the standing stock (yellow eel) and on the number or weight, and sex ratio, of emigrating silver eels, and once every Eel Management Plan reporting period, information should be collected on the other anthropogenic impacts that are reported in national assessments for Eel Management Plans (Table 12b). In all wild salmon and sea trout stocks in Index rivers in areas set out in Table 2 of the EU MAP, information should be annually collected on the abundance of smolt and parr and
the number of ascending individuals. The designation of Index Rivers is to be approved by RCGs.
(f) stock related variables and catch quantities by age class for anadromous and eatadromous species, from commercial and recreational fisheries, including during the freshwater part of their life cycle and independent of the way these fisheries are undertaken [Table pending]
1.3. Data to assess the impact of Union fisheries on the marine ecosystem in Union waters and outside Union waters, which are including (i) data on by-catch of non-target species, in particular species protected under international or Union law_(Table 10), and for monitoring under the CITES Regulation1, (ii) data on impacts of fisheries on marine habitats, (iii) data on impacts of fisheries structure of food webs, and (iv) data on deep sea species.
Z.4. Detailed data on the activity of Union fishing vessels in Union waters and outside Union waters as reported under Regulation 1224/2009. For fleet segments, geographical areas or quantities of fish landed, not collected under Regulation 1224/2009, estimates on representative samples should be provided [Table 14]
3.5. Social and economic data on fisheries to enable the assessment of the social and economic performance of the Union fisheries sector [Table 15]
4.6. Social and economic data and sustainability data on aquaculture to enable the assessment of the social and economic performance and the sustainability of the Union aquaculture sector, including its environmental impact [Tables 16a and 16b]
5.7. Social and economic data on processing sector to enable the assessment of the social and economic performance of the Union processing sector [Table 17]
6.8. Applicable mandatory research surveys at sea [Tables 18a and 18b]

## Chapter 3

## Temporal and spatial and the frequency by which data will be collected

1. Specifications on temporal and spatial data collection and frequency by which data areis to be collected should follow the relevant end users needs and the agreed recommendations provided by Regional Coordination Groups, PGECON and other relevant bodies, endorsed by STECF.
2. When no such recommendation is made, Member States shall establish and describe specifications on temporal and spatial data collection and frequency taking into account historic time series, cost effectiveness and end user needs (Tables 6 and 7).
2.3.For recreational fisheries, regular pilot surveys are specified (every 5 years) and annual surveys of the species listed in Table 4 of the EU MAP or identified by pilot studies and management need.
[^4]
## Chapter 4

## Source of data, procedures and methods

1. The source of data should be described when they are collected under other legal acts than [new DCF regulation], as defined in Article 1 of the DCF regulation. Member States, where relevant, shall explain any differences in collection arising from obligations under other EU legal acts and ways to eliminate potential discrepancies.
2. Member States shall describe, in the corresponding table, where thresholds apply in accordance with Chapter IV of the multi-annual Union programme taking into account the data needs of end users of scientific data and agreements made by the relevant regional coordination groups
3. Where the multi-annual Union programme refers to a pilot study, Member States shall describe such study including, taking account of any recommendations of regional eoordination groups regarding the aim, duration and expected, timeline, milestones and deliverables of the pilot study.
4. Where a simplified methodology may be applied in accordance with Chapter IV of the multi-annual Union programme, Member States shall describe the methods used.
5. Different sampling designs (like metier-based and statistically sound sampling scheme) shall be described in the corresponding tables.
6. DMethologies, definition and calculation of economic variables should follow commonly accepted guidelines by PGECONfelevant bodies, where relevant. For methodologies, Member States should follow commonly accepted guidelines by PGECON and relevant bodies, where relevant. When this is not the case, Member States should clearly describe and justify the adopted approach.
7. Where reference is made in the multi-annual Union programme on further specification on data requirements, the relevant bodies on a regional and EU basis should be consulted.

## Chapter 5

Quality assurance and quality control

1. A quality assurance and quality control framework, in the following referred to as QAF, shall be implemented setting the general principles, methods and tools that can provide guidance and evidence for an effective and common approach at European and National level.
1.2. Data collection methods shall be described in the workplans or in publicly available documents referred to in the workplans, for all data collected(Table 13).
Z.3. Where data are to be collected, it should be done on the Sound Methodology principle. by sampling rather than census, Member States shall use statistically sound designs that follow guidelines for good practice provided by Eurostat-or by ICES, STECF or other expert bodies on behalf of the European Commission. Documentation of sampling schemes-shall follow the principles of the QAF, including but not limited to, of sampling schemes shall
specify specification offy the purposes, design, data archiving and quality assurance procedures, and analysis methods. Description of design should cover the definition of the sampling units, sampling frames and their coverage of the target population (including criteria used for coverage), stratification schemes, and sample selection methods for primary, secondary and lower level sampling units. For census data, Member States shall indicate if all segments are covered and what parts of the total population are missed and how these parts are_estimated. The quality of sampling data shall be demonstrated using quality indicators related to precision and potential for bias.
3.4. Quality, methods and sampling design shall be established on the basis of recommendations from by-Regional Coordination Groups or PGECON, with support from ICES or other relevant scientific bodies where appropriate, and validated by the STECF.
4.5. Where it is not possible to define quantitative targets for sampling programmes, neither in terms of precision levels, nor in terms of sample size, pilot surveys shall be carried out and described as well as a planferecast for data availability. In case the two tables do not match, Member States should also provide clarification on reasons for delay in the data transmission.
5.6. Where quantitative targets can be defined, they may be specified either directly by sample sizes or sampling rates, or by the definition of the levels of precision and of confidence to be achieved.
2. Where concurrent sampling is carried out it shall be indicated whether all species of the eatch are covered, only commercial species or only certain taxa.

## Chapter 6

## Availability of data to end users

For the purpose of describing when data will be collected and by when they will be processed and made available to end-users, Member States shall report already known reporting obligations in [Tables 19 and 205]

## Chapter 7

Regional cooperation and coordination arrangements

1. Member States shall report in Table 21 in which relevant regional and international meetings they participate and in Tables 2216, 17 on how agreed recommendations of RCMs/RCGs and PGECON are followed. If that is not the case, Member States shall explain the reasons. The effect these recommendations have had on their data collection shall be indicated.
2. Member States shall report in Table 2318 all relevant information on agreements with other Member States, to allow for a clear distinction of what data will not be collected, the duration of the agreement and which Member State will be responsible for data collection.
3. Regarding research surveys at sea, Member States shall state any their participation (physical and/or financial) to each individual survey following thean agreements in the relevant regional coordination groups. If agreement is reached on redistribution of tasks
with other Member States, the share as well as the reporting and transmission obligations of each Member State shall be stated.

## Chapter 8 <br> International obligations

Member States shall report on all relevant data collection obligations stemming from international agreements which they are or the Union is party of, and which of the data collection ensures fulfilment of these obligations.

## Table templates and guidance to fill in the tables

Table 1. Description of the fisheries by flag fleet.


This table sould be used for the the Work Plan and Annual Report. For the sampling year columns trips, tons, fishing days number of vessels should be repeated for the sampling year.

Table 2. Description of the landing locations.


This table sould be used for the the AWP and AR. For the sampling year the columns detailing the numbers of landings and tonnages should be repeated. The breakdown of landing location and number can follow the sampling strata, or be optional.
Use Ttables 1 and 2 to summarize the total operations of the national flag fleet of the member state, and the total landings into the Member State.

Table 3. List of required stocks


Table 4．Long－term planning of sampling for biological variables．

| Table 4．Long－term planning of sampling for biological variables |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | WP <br> WP date of submission <br> AR year |  |  |  |  | 31／10／2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MS | Species | Region | RFMO／RFOIIO | Areal | Age |  |  |  |  |  | Weight |  |  |  |  |  | Sex ratio |  |  |  |  |  | Sexual maturity |  |  |  |  |  | Fecundity |  |  |  |  | Comments |
|  |  |  |  |  | Ȧㅗ | 荡 | 豆 | $\begin{array}{\|l} \hline \stackrel{\text { à }}{ } \\ \hline \end{array}$ | 플 | $\underset{\sim}{\tilde{\sim}}$ |  | $\begin{array}{\|c\|} \hline \text { à } \\ \text { an } \\ \hline \end{array}$ | $\stackrel{\text { ä }}{2}$ | $\begin{array}{\|l\|} \hline \stackrel{\text { an }}{ } \\ \hline \end{array}$ |  | $\begin{array}{\|l\|} \tilde{\sim} \\ \tilde{\sim} \end{array}$ | $\stackrel{\underset{\sim}{n}}{ }$ | $\begin{aligned} & \text { äj } \\ & \text { an } \\ & \hline \end{aligned}$ | 클 | $\begin{gathered} \stackrel{\rightharpoonup}{\mathrm{a}} \\ \hline \end{gathered}$ | $\begin{array}{\|l\|} \hline \stackrel{\text { Nu }}{ } \\ \hline \end{array}$ | $$ | $\stackrel{\text { Ä }}{\substack{n}}$ | $\underset{\sim}{\sim}$ | ब̈̈ | $\stackrel{\stackrel{\tilde{N}}{ }}{ }$ | N | へ̃ |  | 믐 | \|ั్ָ̃̃ | İ | ลั |  |
| PRT | Pleuronectes platessa | North Sea and Eastern Arctic | ICES | IV |  |  |  |  |  |  | X |  |  | － |  |  | $\times$ |  |  | x |  |  | $\times$ |  |  | $\times$ |  |  | Not applicable |  |  |  |  |  |
| PRT | Nephrops norvegicus | North Atlantic | ICES | FU7 |  |  |  |  |  |  | X | X | X | X | X | X | X | X | x | X | X | X | $\times$ | X | x | X | X | x | X | － | X | X | X |  |
| ESP | Merluccius merluccius | Mediterranean and Black Sea | GFCM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ESP | Merluccius merluccius | Mediterranean and Black Sea | GFCM | GSA07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | － |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

All individual sampled should be identified to species and have length measurement taken where possible．For species listed in Table 4，additional biological parameters（age，weight，sex ratio，maturity and fecundity）should be collected．Use Table 4 to give an overview of the long－ term sampling strategy with respect to＇stock－based variables＇．For each parameter（age，weight， sex ratio，maturity and fecundity）and year，enter＇ X ＇if data collection has taken place or is planned．This table should allow the evaluators to identify in which year（s）data were／will be collected and hence，whether the MS is respecting the required periodicity for data collection．

Table 5．Sampling intensity for biological variables


Explain the sampling strategy planned regarding the stock－based variables．The parameter ＇Variables＇should be linked to Table 4.

Table 6．Sampling plan description

| Table 6．Sampling plan description |  |  |  |  |  |  |  |  |  |  |  |  | WP |  |  | 31／10／2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  | WP date of submissionAR year |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Planned |  |  |  |  |  |  |  |  |  |  |  |  | Achieved |  |  |  |
| MS | $\left.\begin{array}{\|c\|} \text { MS } \\ \text { participating } \\ \text { in sampling } \end{array} \right\rvert\,$ | Region | $\begin{gathered} \text { RFMOIRFO } \\ 110 \end{gathered}$ | Sub－area I Fishing ground | Scheme | Strata ID number | PSU type | Seasonality （Temporal strata） | Reference years | Average Number of PSU during the the reference years | $\begin{aligned} & \text { Planned } \\ & \text { number of } \\ & \text { PSUs } \end{aligned}$ | $\begin{gathered} \text { WP } \\ \text { comments } \end{gathered}$ | Sampling year（AR） | Total No． <br> of PSU <br> during <br> the <br> sampling <br> year$\|$ | Sampled <br> PSU <br> during <br> the <br> sampling <br> year | $\left\lvert\, \begin{gathered} \text { AR } \\ \text { comments } \end{gathered}\right.$ |
| SCT |  | NSEA NA |  |  | $\begin{array}{\|c\|} \hline \text { Demersal at- } \\ \text { sea } \end{array}$ | SCT SD1－5 | vessel x trip | annual |  | $\sim 4000$ | 40 |  |  | 3765 | 38 |  |
| SCT |  | NSEANA |  |  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Demersal at- } \\ \text { sea } \end{array} \\ \hline \end{array}$ | SCT SD2－5 | vessel x trip | annual |  | $\sim 500$ | 10 |  |  | 674 | 10 |  |
| SCT |  | NSEANA |  |  | $\begin{gathered} \text { Demersal at- } \\ \text { sea } \end{gathered}$ | SCT SD3－5 | vessel x trip | annual |  | $\sim 2000$ | 6 |  |  | 2675 | 6 |  |
| SCT |  | NSEANA |  |  | Demersal at－ sea | SCT SD4－5 | vessel x trip | annual |  | $\sim 750$ | 20 |  |  | 352 | 18 |  |
| SCT |  | NSEANA |  |  | Demersal at－ sea | SCT SD5－5 | vessel x trip | annual |  | $\sim 15000$ | 6 |  |  | 18673 | 5 |  |
| SCT |  | NSEA NA |  |  | Demersal on－ shore | SCT LD1－4 | port X day | annual |  | $\sim 345$ | 60 |  |  | 349 | 61 |  |
| SCT |  | NSEA NA |  |  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Demersal on- } \\ \text { shore } \end{array} \\ \hline \end{array}$ | SCT LD2－4 | port X day | annual |  | $\sim 7000$ | 20 |  |  | 5698 | 19 |  |
| SCT |  | NSEA NA |  |  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Demersal on- } \\ \text { shore } \end{array} \\ \hline \end{array}$ | SCT LD3－4 | port X day | annual |  | ～3000 | 25 |  |  | 3546 | 24 |  |
| SCT |  | NSEANA |  |  | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { Demersal on- } \\ \text { shore } \end{array} \\ \hline \end{array}$ | SCT LD4－4 | port X day | annual |  | $\sim 1000$ | 30 |  |  | 893 | 30 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | $\begin{gathered} \text { North } \\ \text { Atlantic } \end{gathered}$ | NAFO | NAFO | $\begin{array}{\|c\|} \hline \begin{array}{c} \text { sampling at } \\ \text { sea } \end{array} \\ \hline \end{array}$ | L3 | vessel trip | annual | 2015－2017 | 71 | 9 |  | 2018 | 55 | 12 |  |
|  |  | $\begin{gathered} \text { Other } \\ \text { Regions } \end{gathered}$ | IOTC | FAO 51＋ 57 | $\begin{gathered} \text { sampling on } \\ \text { shore } \end{gathered}$ | T18 | vessel trip | annual | 2015－2017 | 157 | 120 |  | 2018 | 169 | 118 |  |

Use Table 6 to identify all sampling schemes in which the member state is participating．The table will list，by scheme，and the strata within the scheme，the primary sampling unit（PSU）type the envisaged number of PSU that will be available in the year of submission．It will for each strata record the number of PSU the member state is planning to undertake．Each row of the table will correspond to a row of the achieved sampling outlined in the annual report．Note that for the ease of automation each column in this table correspond to a field in the CS data exchange format used in the RDB．

Table 7. Sampling frame description

| Table 7. Sampling frame description |  |  |  | WP | 31/10/2016 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{array}{\|l\|} \hline \text { WP date of submission } \\ \hline \text { AR year } \\ \hline \end{array}$ |  |
|  |  |  |  |  |  |
| MS | Strata ID number | Strata | Sampling frame description | Method of unit selection | Comments |
| SCT | SCT SD1-5 | North Sea offshore fish trawlers | Vessel list of 120 DTS $>18 \mathrm{~m}$ | random draw from randomised list |  |
| SCT | SCT SD2-5 | North sea offshore prawn trawlers | Vessel list of 60 DTS targeting shellfish | random draw from randomised list |  |
| SCT | SCT SD3-5 | North sea inshore trawlers | Vessel list of 250 DTS <18m based in NS ports | random draw from randomised list |  |
| SCT | SCT SD4-5 | West coast offshore trawlers | Vessel list of 15 DTS $>18 \mathrm{~m}$ based in WC ports | random draw from randomised list |  |
| SCT | SCT SD5-5 | Westcoast inshore trawlers | Vessel list of 2500 DTS <18m based in WC ports | random draw from randomised list |  |
| SCT | SCT LD1-4 | NE main port | 1 port active for $\sim 345$ days | random weekday from systematic weekly coverage |  |
| SCT | SCT LD2-4 | NE minor ports | 25 ports active over 280 days | random weekday from systematic biweekly coverage |  |
| SCT | SCT LD3-4 | W ports | 10 ports active over $\sim 300$ days | random weekday from systematic biweekly coverage |  |
| SCT | SCT LD4-4 | Island ports | 4 ports active over $\sim 250$ days | random weekday from systematic biweekly coverage |  |
|  |  |  |  |  |  |
| ESP | L3 | trawlers operating in NAFO | vessels with licence to fish in NAFO | random draw from the list of vessels (without replacement) |  |
| ESP | T18 | purse seiners fishing tropical tunas in IOTC | purse seiners fishing in Indian Ocean and landing in the port of Victoria (Seychelles) | random draw from purse seiner vessels landing in the port of Victoria (Seychelles) | purse seiner fleet, fishing tropical tunas in Indian Ocean lands their catches in the ports of Victoria, Mahé, Mombasa, Antisarana, but due to the long distance, sampling can be performed only in the port of Victoria (where most of the fleet landings take place) |

Table 6 can also be linked to additional QA information to be supplied about the sampling schemes and strata

Table 8. Achieved sampling (only for Annual Report)

optional
Tables 6 and 7 can be linked to additional Quality Assurance information about the achieved sampling to be supplied in the Annual Report. Note that for the ease of automation, each column in the achieved sampling table can be calculated from fields in the CS data exchange format used in the Regional Data Base.

Table 9. Achieved length sampling of catches, landings and discards by species (only for Annual Report)


Use Tables 1A, B, C of the new EU MAP to identify which stocks are going to be included in the sampling scheme of volume of catch fractions including discards. The aggregation level (metiers) should follow Table 3 of new EU MAP.

Table 10. Incidental catch of vulnerable species (marine mammals, seabirds, reptiles etc.) (only for Annual Report)

|  |  |  |  |  |  |  |  |  | WP |  |  | 31/10/2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Table 10. Incidental catch of vulnerable species (marine mammals, seabirds, reptiles etc.) |  |  |  |  |  |  |  |  | WP date of submission |  |  |  |
|  |  |  |  |  |  |  |  |  | AR year |  |  |  |
| MS | Sampling year (AR) | Region | RFMO/RFO/ 10 | Sub-area $/$ <br> Fishing ground | Metier (level 6) | Number of trip by metier in the sampling year | Group of vulnerable species | Family* | Species* | Is there any mitigation device? | Total number of individuals caught | Comments |
| FRA | 2015 | North Sea and Eastern | ICES |  |  |  |  |  |  |  |  |  |
| FRA | 2015 | Mediterranea <br> n Sea and <br> Black Sea | GFCM |  |  |  |  |  |  |  |  |  |
| FRA | 2015 | North Sea <br> and Eastern <br> Arctic | ICES |  |  |  |  |  |  |  |  |  |

This table provides details on recorded incidental by-catch. These numbers cannot be used for the estimation of incidental by-catch on fleet level, because sampling schemes are not designed for sampling of rare species. In the first place, incidental by-catch can only be observed at sea, not in port sampling programmes. Secondly, on board observers are likely to miss incidental by-catch when sampling the target fish species. The actual observer effort to scan the whole catch for incidental by-catch is included in the data uploaded to the Regional Database, but is not presented in this table.

Table 11: Recreational fisheries

| Table 11 | rational | eries |  |  |  |  |  |  |  |  |  |  | $\begin{array}{\|l\|} \hline \text { WP year of submission } \\ \hline \text { AR year } \\ \hline \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ms | ${ }_{\substack{\text { Samplng } \\ \text { year }}}^{\text {ar }}$ | Region | Remorfono | Species | ${ }_{\text {a }}^{\text {Appleable ( Species }}$ | Reasons for not sampling | $\left\lvert\, \begin{gathered}\text { Annua esimate of } \\ \text { catch Y Y }\end{gathered}\right.$ | Annual percentage of released catch $(Y / N)$ | $\left\lvert\, \begin{gathered}\text { Coloection of eateh } \\ \text { composition data } Y \text { N }\end{gathered}\right.$ | Type of Surey |  |  |  | Comments |
| uk | 2015 |  | ${ }^{\text {cees }}$ | ${ }^{\text {cod }}$ | $r$ |  | $r$ | $r$ | $r$ | National estimates of numbers of trips \& onsite surveys of catch per |  |  |  |  |
| NL | 2015 |  | ICEs | Eel | $r$ |  | $r$ | $r$ | $r$ |  |  |  |  |  |
| uk | 2015 |  | ices | Shank | N |  | r | $r$ | $\checkmark$ | $\begin{gathered} \text { National estimates of numbers of } \\ \text { trips \& onsite surveys of catch per } \\ \text { unit effort } \end{gathered}$ |  |  |  |  |
| DE | 2016 |  | (ces | Elasmobaranchs | $r$ | No calchens | N | N |  |  |  |  |  |  |
|  |  |  | ${ }_{\substack{\text { ICCES } \\ \text { ICEs }}}^{\text {ces }}$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Northalinic |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | ${ }_{\substack{\text { cFCM } \\ \hline 6 \mathrm{FCM}}}$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | ${ }_{\text {c }}^{\text {cram }}$ |  |  |  |  |  |  |  |  |  |  |  |

- All the species listed in Table 4 of the EU MAP or identified by pilot studies and/or management need for the recreational fishery (by region) should be included here. All species should be included even if the species are not present in the country along with the reason for not sampling. (e.g. species not present in the area, regulations/laws in the country, fit the requested threshold, etc.)
- MS should indicate whether it plans estimation of the annual catches (weight and numbers), rate of released fish, and indicate if composition of the catch of fishes will be collected, and eventually to report them in the AR.
- MS should indicate the types of survey that will be done to collect data and should refer to a detailed plan compiled that includes all aspects defined in Chapter 1.
- Three columns are provided to indicate if MS has planned and thereafter achieved the collection of recreational fisheries data as specified in the Annual Report, and the data have been transmitted to the EC.

Table 12a: Anadromous and catadromous species data collection, long term river by river

| Table 12a. Anadromous and catadromous species data collection, long term river by river |  |  |  |  |  |  |  |  |  |  |  |  | WP Year of submission |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sampling period | Region / EMU | RFMOIRFOIIO | Species | Applicable yln | Reasons for not sampling | Index River | Life stage | Fishery independent |  | Fishery catch estimate |  |  |  |
| ms |  |  |  |  |  |  |  |  |  |  | $\begin{array}{\|c\|} \hline \text { AR Year } \\ \hline \begin{array}{c} \text { Collection of } \\ \text { biological variables } \end{array} \\ \hline \end{array}$ | Comments |  |  |
|  |  |  |  |  |  |  |  |  |  | y/n |  |  |  |  | y/n |  |
| FIN | 2017-2020 | Baltic | NASCO | salmon |  |  | RIVER AAA | parr | electrofishing |  | N/A |  | $y$ |  |
| FIN | 2017-2020 | Baltic | NASCO | salmon |  |  | RIVERAAA | smolt | trap | y | N/A |  | y |  |
| FIN | 2017-2020 | Baltic | NASCO | salmon |  |  | RIVER AAA | adult | counter | y | N/A |  | y |  |
| FIN | 2017-2020 | Batic | NASCO | salmon |  |  | RIVER AAA | adult |  | n | logbook/ records | y | y |  |
| FIN | 2017-2020 | Baltic | ICES | eel |  |  | RIVER EEE | glass | trap/electofishing | $y$ |  |  | $y$ |  |
| FIN | 2017-2020 | Baltic | ICES | eel |  |  | River eee | yellow | electrofishing / fykes | $y$ |  |  | $y$ |  |
| FIN | 2017-2020 | Baltic | ICES | eel |  |  | RIVER EEE | silver | trap/ fyke/ counter | y |  |  | , |  |
| GBR | 2017-2020 | UK Northerm | ICES | eel |  |  | N/A | glass |  |  | records | $y$ | y |  |
| GBR | 2017-2020 | UK Northerm | ICES | eel |  |  | N/A | yellow |  |  | records | y | y |  |
| GBR | 2017-2020 | UK Northerm | ICES | eel |  |  | N/A | silver |  |  | records | y | y |  |

- Column Region / EMU: Region is filled for salmon while EMU (Eel Management Unit) is filled for eel
- Column Applicable Y/N: N only when species is not present or fisheries of this species is banned.
- Column Index River: See definition on EU MAP and fill with the name of the river/system chosen per each EMU (Eel Management Unit).
- Fishery Independent: Data derived from sources other than commercial and recreational catches. In these two columns, the collection or not of data should be stated (Y/N).
- Method: MS should indicate which method is selected for collecting data. If no data were collected MS should describe in the WP the information (e.g. data, estimates, relative trends, etc.) collected for eel on the abundance of recruits (glass eel), the abundance of the standing stock (yellow eel) and on the number or weight, and sex ratio of emigrating silver eels. For wild salmon and sea trout stocks, information on the abundance of smolt and parr and number of ascending individuals.

Table 12b: Anadromous and catadromous species data collection, yearly planned and achieved


- If data were planned to be collected (Table 12a) the objective planned must be documented in this table.
- Column Region / EMU: Region is filled for salmon while EMU (Eel Management Unit) is filled for eel
- Column Index River: See Table 12a.
- Column Fishery/ Independent data collection: See Table 12a for definition.
- Column Method: For each method of Table 12a, give the quantitate objective planned for the unit chosen by MS.
- Column Unit: fill the unit (e.g. number of samples, sites, etc.) chosen by MS.

Table 13. Quality Assurance Framework


Table 13 is applicable for all sampling schemes except surveys at sea. Use Table 13 to identify were documentation on different steps (design, data capture, data storage and data processing) in the data collection process can be found. If proper documentation presently do not exist please indicate this in the comment field and include when (year) this documentation will be public available. Further use the table to indicate in which databases (national and international) detailed data is stored and if the implementation of the sampling scheme is monitored through collection of non-responses. Names on sampling schemes and strata should be identical to those in Tables 6-8 (and also for eels/salmon and recreational fisheries).

Table 14: Fishing activity variables data collection strategy Transversal variables data collection strategy (former table IIF1)

Region, fishing technique and length class should be aligned to table 9

|  |  |  |  |  |  |  |  |  |  |  |  |  | Eme | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - - | - | --me | - | - | $\pm 2$ | $=2$ | $\underline{2}$ | -3-3-m | $\underline{-3}$ | I $=$ | -- | $\underline{2}$ | $\underline{=}=$ | - |
| - |  | - | - | , |  |  | , |  |  |  |  | , | , |  |
| $\cdots$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\underline{\square}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\pm$ | - |  |  |  |  |  |  |  |  |  |  |  |  |

The transversal variables are listed in Table 5 of new EU MAP. Duta sources (e.g. logbooks, landings and effort declarations, census, surveys etc.) should be clearly stated for each variable. Where survey work is being undentaken, concise details should be given about
Type of data collection
Farget and frame population
Data sources
Sampling frame and allocation scheme
Estimation
MS should describe methodologies, including conversion factors and the approach followed to calculate ammual average prices per species (it is recommended to use weighted averages), to derive final estimates. MS may provide detailed calculation procedures, including statistical ones, in an annex. MS shall describe specific actions for fleet segments, geographical areas and/or fish quantities landed not covered under the Control Regulation, from geographical areas. MS shall provide estimates based on representative samples at the lowest relevant geographical level.
Supra-region, fishing technique and length class should be aligned to Table 15.
The fishing activity variables are listed in Table 5 of the EU MAP. The data sources either control regulation or complimentary data collection should be clearly stated for each variable group or variable in the case different sources should be used within a specific variable group. For each of these data sources, the planned coverage percentage, estimated on the basis of fishing trips, should be provided as quality assurance and quality control framework indicators. MS should describe the methodologies used: to cross-validate the different sources of data, to estimate the value of landings, the average price (it is recommended to use weighted averages, trip by trip) and to collect the complimentary data (sample plan methodology, type of data collected, frequency of collection, etc.)
MS should describe the methodology followed to derive final estimates, whether it is in-line with guidance/best practices across EU or if a specific approach is being used MS may provide detailed calculation procedures, including statistical ones, in an Annex. MS shall describe specific actions for fleet segments, geographical areas and/or fish quantities landed not covered under the Control Regulation, from geographical areas. MS shall provide estimates based on representative samples at the lowest relevant geographical level.

Table 15. Population segments for collection of economic data

| Table 15. Population segments for collection of economic data |  |  |  |  |  |  | WP | 2017-2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | WP date of submission <br> AR year | 31/10/2016 |
| MS | Planned |  |  |  |  |  |  |  |
|  | Supra region | Fishing technique (a) | Length class (a) | Variables | Data Source | Type of data collection scheme (b) | Planned sample rate \% (c) | Comments |
| ESP | Baltic Sea, North Sea and Eastern Arctic, and North Atlantic | Beam trawlers | 18-<24 m | Gross value of landings | questionnaires | A - Census |  |  |
| ESP | Baltic Sea, North Sea and Eastern Arctic, and North Atlantic | Beam trawlers | 40 m or larger | Other income | questionnaires | B - Probability Sample Survey |  |  |
| ESP | Mediterranean Sea and Black Sea | Drift and/or fixed netters | 12 - 18 m | Wages and salaries of crew | questionnaires | C - Non-Probability Sample Survey |  |  |
|  |  |  |  |  |  |  |  |  |

Note: Please ensure data for active and inactive vessels are presented separately.
(a) put an asterisk in the case the segment has been clustered with other segment $(\mathrm{s}$ )
(b) A-Census; B-Probability Sample Survey; C - Non-Probability Sample Survey; D-Indirect survey [In case the variable is not directly collected but estimated, Indirect survey is
applied. In that case, further explanation on the data collection scheme and estimation method is provided in the Work plan text.]
(c) planned sample can be modified based on updated information on the total population (fleet register)
(c) par of submission is next after imentaion Just keop repa

The Supra regions are listed in Table 6b of the EU MAP. In case there are any differences in data collection schemes between national regions or supra regions MS should provide information about it. Fishing technique and length class should be linked to table 8. MS should describe how the population is defined and list of active vessels is established. Some of economic variables should be collected for active and inactive vessels, therefore inactive fleets should be included in the table.

The Planned Sample rate (\%) should be based on the efficial fleet population, which defines as im vessels included in the Fleet Register on the 31st of December and any active vessel fishing at least one day during the year. Table 15 should include full list of the economic variables from Table 6 of new EU MAP.

In case when for some variables data collection has not implemented the column 'Planned sample rate (\%)' should be filled in with 'NO'.
MS should explain if there are any confidentiality issues. In case if country is using clustering for data collection or data submission MS should explain the clustering scheme. In cases clustering is used for data collection purposes MS should indicate cluster name (clustering schemes and description provided at Methodological Guidelines). The segment should be marked with an asterisk in the table, in case the segment has been clustered with other segment for data collection purposes.

The economic variables are listed in Table 6 of new EU MAP. The social variables are listed in Table 7 of new EU MAP. Data sources should be clearly stated for each variable. Describe how the consistency of data coming from different data sources will be ensured. Where survey work is being undertaken, concise details should be given in the Annex about:

- Data sources
- Type of data collection
- Target and frame population
- Sampling frame and allocation scheme
- Estimation procedures
- Data quality

Table 16a. General overview of aquaculture activities
Economic variables to be collected are indicated in Table 8 of the new EU MAP, according to the sector segmentation of Table 10 of the new EU MAP


Use this section and Table 16a to give a general and concise description of the MS's aquaculture sector. Enter 'Yes' or 'No' in the appropriate cells, regardless of the quantities produced. If quantities produced by a certain segment are too small to justify any sampling activities and identified it with NS (no sampling) in brackets behind "Yes" in the respective cell.

Table 16b. Population segments for collection of aquaculture data


Follow the Table 16a to stratify the population for the Table 16b. The enterprises should be segmented according to their main farming technique. In this view, describe the criteria used to identify the main farming technique (e.g. on the basis of turnover, production). The population is all enterprises whose primary activity is defined according to the EUROSTAT definition under NACE Code 03.21 and 03.22 and who operate for profit. Economic data shall be collected on annual basis. In case additional sources (e.g. veterinary register, aquaculture licences register, etc.) are to be used to adjust the population, MS shall explain the procedure used. Specify data collection for variables not covered by the ESTAT or for which additional sampling is required.

Table 16b should include full list of the economic variables from Table 8 of new EU MAP. Present the planned sample rate (\%) in Table 16b. In case when for some variables data collection has not implemented the column 'Planned sample rate (\%)' should be filled in with 'NO'.

Data sources should be clearly stated for each variable. Describe how the consistency of data coming from different data sources will be ensured. Where survey work is being undertaken, concise details should be given in the Annex about:

- Data sources
- Type of data collection
- Target and frame population
- Sampling frame and allocation scheme
- Estimation procedures
- Data quality

Table 17: Processing industry: Population segments for collection of economic data

| Table 17. Processing industry: Population segments for collection of economic data |  |  |  |  | WP | 2017-2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | WP date of submission | 31/10/2016 |
|  |  |  |  |  | AR year* |  |
| MS | Planned |  |  |  |  |  |
|  | Segment (b) | Variables | Data sources | Type of data collection scheme (a) | Planned sample rate \% (b) | Comments |
| ES | Companies <= 10 | Turnover | financial accounts | B - Probability Sample Survey |  |  |
| ES | Companies 11-49 | Other operational co | questionnaires | B - Probability Sample Survey |  |  |
| ES | Companies 50-250 | Other operational c | questionnaires | A - Census |  |  |
| ES | Companies <=250 | Other income | questionnaires | B - Probability Sample Survey |  |  |
|  |  |  |  |  |  |  |

(a) A - Census; B - Probability Sample Survey; C - Non-Probability Sample Survey; D-Indirect survey [ In case the variable is not directly collected but estimated, Indirect (b) planned sample can be modified based on updated information on the total population (fleet register)

* year of submission is next after implementation. Just keep reporting year.

The economic and variables for the processing industry sector for companies $<10$ employees and companies whose main activity is not fish processing are listed in Table 11 of new EU MAP. The population shall refer to all enterprises whose main activity is defined according to the EUROTAT definition under NACE Code 10.20: 'products'; "Processing and preserving of fish, crustaceans
and molluscs." For those enterprises that carry out fish processing but not as a main activity, it is also mandatory to provide information on population. Specify data collection for variables not covered by the ESTAT or for which additional sampling is required. If segmentation is to be used the criteria for it should be number of persons employed. The following segmentation are recommended: companies <=10; companies 11-49; companies 50-250; companies <=250.
Table 17 should include full list of the economic variables. Present the planned sample rate (\%). In case when for some variables data collection has not implemented the column 'Planned sample rate (\%)' should be filled in with 'NO'.
Data sources should be clearly stated for each variable. Describe how the consistency of data coming from different data sources will be ensured. Where survey work is being undertaken, concise details should be given in the Annex about:

- Data sources
- Type of data collection
- Target and frame population
- Sampling frame and allocation scheme
- Estimation procedures
- Data quality

Table 18a: List of surveys-at-sea


| Achieved Days at sea | Achieved Days at sea |
| :--- | :--- |
| Achieved Target | Number of achieved sampling activities |
| \% achievement no days ----- A/P | Formula |
| \% |  |
| $\%$ achievement target ----- A/P | Formula |
| \% |  |
| Deviation from mandatory list | Is there any deviation in the spatial coverage planned? If no: N. If yes: Areas covered in the |
| spatial) | Survey |
| Deviation from mandatory list | Is there any deviation in the temporal coverage planned? If no: N. If yes: Time period (in |
| (temporal) | months) covered in the survey |
| Comments | Any further comment |

Table 18b: Survey data collection and dissemination


| Name of the variable | Guidelines |
| :--- | :--- |
| Name of survey | Name of the survey. For mandatory surveys it should be the same name included in EU-MAP <br> table 12 |
| Acronym (as EU MAP*) | Acronym of the survey. For mandatory surveys it should be the same acronym included in <br> EU-MAP table 12 |
| Type of data collected | Type of data collected. Include one separate line for each type of data collected. MS are <br> prompted to use the categories below and add new ones only if necessary: <br> Biological data for a given stock, larvae data for a given stock, egg production for a given <br> stock, CTD by haul, litter by haul, marina mammal observations, benthos in the trawl... in the <br> case of multispecies surveys, different stocks may be grouped <br> (input needed to cover as much as possible all types of sampling activities) |
| Core/additional variable | Core variables are those resulting from core sampling activities driving the survey design. <br> Additional variables are all the rest |
| Used as basis of Advice | Are these data used as basis for Advice? |
| Upload in international database | Are these data uploaded in international data bases? Y/N/NA. Use NA if an interrnational data <br> (y/n) |
| Other data dissemination | Are these data disseminated in any other way, apart from international data base? If no: N. If <br> yes: especify the where it has been disseminated (examples missing) |
| Comments | $\underline{\text { Any further comments }}$ |

Table 19. Data transmission
Table 19. Data transmission
WP year of submission

| MS | End-user | Expert group, data call, or data <br> programe (RFMO/RFO/IO) | Year of the <br> data call | Reference(s) to WP | Comments |
| :--- | :--- | :--- | :--- | :--- | :--- |
| FRA | ICCAT | TASK Ib |  |  |  |
| FRA | GFCM |  |  |  |  |
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Table 20. Data availability

** of the data collected

Table 21: Planned regional and international co-ordination
Table 21. Planned and achieved regional and international co-ordination

|  |  |  |  |  | AR year* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PLANNED |  |  |  |  | Achieved MS |  |
| MS | Acronym | name of meeting | RFMOIRFOIIO | Planned MS participation | Achieved MS participation | Comments |
| SWE | RCM Med |  |  | X |  |  |
| SWE | WGNSSK |  | ICES | X |  |  |
| SWE | MEDITS |  |  | X |  |  |

* year of submission is next after implementation. Just keep reporting year.
** For the version control. Could be automated.

Table 22: Follow-up of recommendations and agreements

| Table 22. Follow-up of recommendations and agreements |  |  |  |  |  |  |  | WP | 2017-2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | WP date of submission <br> AR year* | 31/10/2016** |
| MS | Region | RFMO/RFOIIO | Source | Section | Topic | Recommendation number | Recommendation/Agreement | Follow-up action | Comments |
| SWE | North Atlantic |  | LM 2014 |  | $\begin{gathered} \hline \text { Metier } \\ \text { related } \\ \text { variables } \end{gathered}$ |  |  |  |  |
| LVA | Baltic |  | $\begin{aligned} & \hline \text { STECF } \\ & 14-13 \\ & \hline \end{aligned}$ | VII |  |  |  |  |  |
|  |  |  |  | IIII.C, IIII.E |  |  |  |  |  |
|  |  |  |  | III.F |  |  |  |  |  |
|  |  |  |  | all |  |  |  |  |  |
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Table 23: Bi- and multilateral agreements

| Table 23. Bi - and multilateral agreements |  |  |  |  |  |  | $\begin{array}{\|l\|} \hline \text { WP } \\ \hline \text { WP date of submission } \\ \hline \text { AR yearat } \\ \hline \end{array}$ | $\frac{2017-2020}{31 / 10 / 2016^{* *}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| MSs | Contact persons | content | coordination | $\begin{aligned} & \text { description of } \\ & \text { sampling / sampling } \\ & \text { protocol / sampling } \\ & \text { intensity } \end{aligned}$ | data transmission | access to vessels | validity | Comments |
| DE - DK | name and email address by MS participating | a) DE vessels landing for first sale in DK to be covered under r D NP. bi DK vessels landing for first sale in DE to be covered under DK NP. | NA | Length and age of <br> discards and landings, <br> in accordance with the <br> respective NP. <br> Levels and coverage of <br> sampling to be as <br> agreed at the annual <br> RCMs Baltic and | DE/DK responsible for submitting data from each own vessels to the respective end-users and to each other. | country responsible for sampling ensures access to vessels | according to NP 2011-2013 |  |
| LT-DE-LV-NL-PL |  | DE, LV, LT, NL, PL to cooperate in the biologial data collection on pelagic fisheries in CECAF waters in 2012- 2013 and 2014-2015 (new extension). | NL to coordinate the execution of this multi- lateral agreement. NL will contract independent contractor Corten Marine Research' (CMR) as agent between NL and IMROP, the Mauritanian Fisheries Research Institute. CMR will hire Mauritanian observers Irom IIROP to carry out the actual sampling. CMR and IIMROP will have an agreement in which the mutual olbigations will be formalized; among others that only the additional costs for this specific task will be priced. | Biological sampling carried on board fishing vessels in CECAF area by Mauritanian observers. Observers introduced by CMR and follow the sampling protocol as described in "Biological Data Collection of pelagic fisheries in CEAF waters in compliance with the DCF", version 31-05-2011. |  | Each Partner ensures access to its fleet for Mauritanian observers under this agreement. Denied access to vessels does not exempt a Partner from legal or financial obligations. | This agreement commences on January 1, 2012. With exception of financial obligations. it ends on December 31, 2013. It is subject to dissolve prior to this date in case the pelagic fishery in the CECAF area by EU vessels closes. Eventual remaining contributions will be pro rata reimbursed to Parthers. The agreement was extended to a new end date: 31 December 2015 |  |

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## WP Annex (for economic data):

## Data sources

Provide a list of data sources used (logbook, sales notes, accounts, etc.) and a description of each data source. Describe how the consistency of data coming from different data sources will be ensured. If a questionnaire is going to be used, a copy of this may be included in an annex to the WP.

## Type of data collection scheme

Indicate in the Table which type of data collection is to be applied for each fleet segment and for each economic variable as listed in Table 6 of EU MAP. A text description should be provided per each type of data collection scheme.
Four different types of data collection schemes could be used for data collection:
A) Census, which attempts to collect data from all members of a population. This would include collection of data from administrative records, as well as other cases in which data are derived from sources originally compiled for non-statistical purposes.
B) Probability Sample Survey (PSS), in which data are collected from a sample of a population members randomly selected.
C) Non-Probability Sample Survey, in which data are collected from a sample of population members not randomly selected.
D) Indirect survey. In case the variable is not directly collected but estimated, indirect survey is applied.

## Target and frame population

A description of the sampling frame should be provided if data are to be collected through a Probability Sample Survey or/and Non-Probability Sample Survey.
Type of sampling strategy.
Describe the selection of sampling units and the type of sampling strategy used (e.g., simple random sampling, systematic sampling, sampling with PSS, multiple stage sampling, etc.)
Further stratification within fleet segment.
Describe if fleet segments have been divided into subsets (strata) before the selection of a sample. Define what parameters have been used for stratification. Determine the sample size for each fleet segment. Explain which targets are used to determine the sample size and why these targets have been chosen.
Sample evolution over time, rotational groups.
In the case where rotation will be applied to substitute non-responsive units, this should be clearly described and the consequences for the estimates should be discussed.
Describe any projected changes in sample size over time and should report the number of sample units that will be substituted from one year to another.

## Estimation

Information on planned methodologies to derive final estimates from data collected (sample) should be given for each variable.
Estimation methods from sample to population.
Describe the type of estimators to be used according to the type of sampling strategy (for example, Horvitz-Thompson or Hansen-Hurwitz estimators). Describe the planned estimation procedures, including the nature of any additional information used, e.g. value of landings, effort and etc. indicators used for extrapolation of the results from the sample.
Imputation of non-responses/ Non-response adjustments.
In the case of a census with non-responses, variables should be estimated using models described in the methodological report (Annual Report). Methods used to evaluate the accuracy of these estimates should also be discussed under Section data quality evaluation.
Describe the statistical models used, e.g., regression analysis, adjustments of raising actors, etc.
Where substitution is applied in cases of unit non-responses, the following information should be provided:

- method of selection of substitutes;
- the main characteristics of substituted units compared to original units.


## Data quality evaluation

A description should be provided for each type of data collection scheme.
Describe the methods to assess the variability of the estimates and to assess the bias derived from non-responses and from the use of models in the case of non-probability sampling. MS is invited to refer to the relevant guidelines where these terms are defined and explained.
Use the table to give further details on the methods to be used to assess the bias derived from nonresponses and from the use of models in case of non-probability sampling. Information on data quality evaluation depends on the type of data collection and on the type of error. Methods used have to be described in the text following relevant Guidelines provided within the Quality Assurance Framework (QAF).
In case a MS is using additional quality insurance procedures, they should be described in the WP.
Two types of error should be distinguished: bias and variability.

## Derogations and non-conformities

Justify any derogation requested and any non-conformity with the requirements of the EU MAP and Methodological Guidelines provided by PGECON. When relevant, this justification should be based on scientific evidence. Note that under the EU MAP, there are no provisions for the exclusion of any part of the population from data collection (by means of thresholds, e.g. fishing effort, quantities landed, revenues, etc.).

Europe Direct is a service to help you find answers to your questions about the European Union Freephone number (*): 0080067891011
$\left(^{*}\right)$ Certain mobile telephone operators do not allow access to 00800 numbers or these calls may be billed.

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## STECF

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.

As the Commission's in-house science service, the Joint Research Centre's mission is to provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle.

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Stimulating innovation
Supporting legislation


[^0]:    ${ }^{1}$ Updated criteria based on STECF-SGRN 10-03, also taking into account the relevant criteria for the establishment of multi-annual Union programmes as specified in the new DCF.

[^1]:    2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy) Descriptor 1: Biodiversity
    ${ }^{8}$ _ Descriptor 4 of the MSFD: Marine foodwebs
    9 As defined in Regulation Xx/XXX [deap sea]
    ${ }^{10}$ _ Descriptor 6 of the MSFD: integrity of the sea floor

[^2]:    ${ }^{11}$ Thresholds do not apply for International agreements e.g data collection under RFMOs or SFPAs

[^3]:    ${ }^{12}$ Thresholds do not apply for International agreements e.g data collection under RFMOs or SFPAs

[^4]:    ${ }^{4}$ Council Regulation (EC) No 338/97 of 9 December 1996 on the protection of species of wild fauna and flora by regulating trade therein

