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COMMISSION STAFF WORKING DOCUMENT

**27th PLENARY MEETING REPORT OF THE SCIENTIFIC, TECHNICAL AND
ECONOMIC COMMITTEE FOR FISHERIES (PLEN-08-01)**

PLENARY MEETING

14-18 APRIL 2008, HAMBURG

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

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1. INTRODUCTION

STECF met at the Institute of Sea Fisheries of the Johann Heinrich von Thünen Institute from 14 to 18 April 2008. The Chairman of the STECF, Dr John Casey, opened the plenary session at 14:00h. The terms of reference for the meeting were reviewed and the meeting agenda agreed. The session was managed through alternation of Plenary and working group meetings. Rapporteurs for each item on the agenda were appointed and are identified in the list of participants. The meeting closed at 16:00h on 18 April.

2. LIST OF PARTICIPANTS

Contact details are attached in ANNEX I.

Members of the STECF:

Abella, J. Alvaro (Rapporteur)
Andersen, Jesper Levring (Vice-chair)
Bailey, Nick (Rapporteur)
Casey, John (Chair, Rapporteur)
Curtis, Hazel (Rapporteur)
Di Natale, Antonio (Vice-chair, Rapporteur)
Dobby, Helen (Rapporteur)
Döring, Ralf (Rapporteur)
Figueiredo, Ivone
Guillen, Jordi
Gustavsson, Tore
Hatcher, Aaron (Rapporteur)
Kirkegaard, Eskild (Rapporteur)
Kraak, Sarah
Kuikka, Sakari (Rapporteur)
Martin, Paloma (Rapporteur)
Polet, Hans (Rapporteur)
Prellezzo, Raul (Rapporteur)
Sabatella, Evelina
Somarakis, Stylianos
Stransky, Christoph (Rapporteur)
Vanhee, Willy
Van Hoof, Luc
Van Oostenbrugge, Hans (Rapporteur)
Virtanen, Jarno

External experts:

Anderson, John (Rapporteur)

BLACK SEA GROUP:

Daskalov, Georgi (WG chair & rapporteur)

Raykov, Violin

Panayotova, Marina

Radu, Gheorghe

Maximov, Volodea

Shlyakhov, Vladyslav A.

Zengin, Mustafa

ANCHOVY GROUP

Roel, Beatriz (WG chair and rapporteur)

Villamor, Begoña

Abaunza, Pablo

Pawlowski, Lionel

Uriarte, Andres

Sanchez, Sonia

Perraudeau, Yves

Del Valle, Ikerne

European Commission**DG- MARITIME AFFAIRS AND FISHERIES (MARE)**

Biagi, Franco

Daniel, Patrick

Lindemann, Jan-Henning

Pertierra, Juan-Pablo

JOINT RESEARCH CENTRE (JRC)

Dörner, Hendrik

Nord, Jenny

Rätz, Hans-Joachim

Members of the STECF not present:

The following members of the STECF informed the secretariat that they were not able to attend the meeting:

Balguerías, Eduardo

Cardinale, Massimiliano

Daures, Fabienne

Graham, Norman

Gascuel, Didier

Parkes, Graeme

3. TERMS OF REFERENCE

The terms of reference included both issues that had been presented a month in advance and urgent matters that meanwhile had arisen after dialogue between the Commission and Member States. The two categories are not distinguished below.

3.1. Information from the Commission, organizational matters

The Commission will inform STECF of progress on issues concerning the framework for scientific advice in 2007 and afterwards.

3.2. Bioeconomic issues

Long-term management plan for anchovy in the Bay of Biscay

A working group will work in parallel to the STECF plenary and is expected to present its results to the STECF in the afternoon of 17 April.

Background

The Commission intends to make a proposal for a long-term management plan for the anchovy based on the following objectives:

1. to ensure the exploitation of the stock at high yields consistent with maximum sustainable yield;
2. to guarantee the stability of the fishery, as far as possible, and with a low risk of stock collapse.

In 1999, the Commission entrusted STECF to produce an extended risk analysis showing, under different multi-annual management strategies, the consequences on the sustainability of the resource expressed in terms of risk of collapse and on the total annual yield. The evaluations included a test of robustness to a wide range of choices in the underlying biological parameters such as stock-recruitment relationships and fleet harvest behaviour models to simulate different responses of the fleet to resource availability.

In November 2007, the Commission has produced non-paper gathering different elements that should be considered and discussed with Member States, the scientific community and the SWW RAC. These should be thoroughly analysed before they are incorporate into the long-term plan.

Terms of References

1. Having in mind the two basic objectives of the long-term management plan and the work produced in 1999, STECF is requested to provide an updated advice on the strategy to follow.

In case the new knowledge implies significant changes, recommend adaptations as appropriate.

2. Given a possible stock recovery under the long term proposal, for each Member State, what economic impacts (e.g. costs, revenues) can be expected considering the two scenarios described in Commission's non-paper:

- a. strategy with relatively higher TAC levels but higher collapse risks,
- b. strategy with relatively lower TAC levels and less frequent collapse risks.

3. Given a possible stock recovery under the long term proposal, for each Member State, what social impacts (e.g. employment) can be expected considering the two scenarios described in Commission's non-paper:

- a. strategy with relatively higher TAC levels but higher collapse risks,
- b. strategy with relatively lower TAC levels and less frequent collapse risks.

Attached documents:

STECF/SGRST Report 1999, STECF opinion on STECF/SGRST Report 1999, Commission non-paper 2007 are to be found in the document section of the meeting's web site (<http://stecf.jrc.ec.europa.eu/events>).

Balance between capacity and exploitation

STECF is requested to review the report of the SGRST-08-01 meeting of February 19-22, 2008 (Brussels), evaluate the findings and make any appropriate comments and recommendations.

ToRs of the WG were as follows:

1. Undertake a literature review concerned with assessing overcapacity in European fisheries. This task will be frontloaded and will be presented at the start of the meeting.

2. Further study which biological/technical indicators should be recommended to assess the balance question. The biological indicators so far retained by the previous working group (SGECA-SGRST 07-05) are: Ratio between current and target fishing mortality, Catch per unit of effort, Ratio between catch and biomass. Since the balance between capacity and exploitation is to be assessed at national level, these indicators should ideally be fleet and country specific.

a) Biological data are available at Community (region) level and – at least for fisheries shared among Member States -, not at Member States level. The working group is requested to advise ways of addressing this issue. One avenue addressed in the report of the previous working group (p. 7) is to look at MS quotas agreed at Community level where those are restricting in nature, i.e. are being (almost) exhausted before the end of the season or even overshoot, and representing a predominant interest of the fleet concerned. Examining the quota utilisation rates by fleets might show a trend over time. A further trend might be established

by the "regional view" coming from e.g. a targeted fishing mortality in stocks concerned, in particular when these are not subject to the TAC and quota system;

b) STECF summer 2007 plenary gave a list of indicators that might be considered for the desired simple approach to expressing the balance. Among them was the capacity utilisation rate expressed in real fishing days/maximum possible fishing days. The previous working group explored this indicator and discussed the lack of individual vessel data from DCR calls, and the problem of comparing vessel behaviour within not fully homogenous fleet segments. The working group is requested to finalise this assessment.

3. Draft guidelines for practical steps to improve the reporting on the balance between fishing capacity and fishing opportunities by Member States, based on the preference list of "balance-indicators" already identified by the SGECA-SGRST working group 07-05 and conclusions on point 2 above. The indicators so far identified by the previous working group are:

- Economic indicators: Return on investment, Break-even revenue/current revenue;
- Biological indicators: Ratio between current and target fishing mortality, Catch per Unit of effort, Ratio between catch and biomass,
- Social indicators: Gross value added, evaluation of crew wages

The guidelines should provide the following:

a) for each indicator

- A short discussion of each indicator, in particular its strengths and weaknesses (concerning the balance question in general and usability in different fisheries)
- The data requirements and calculation method
- a recommended minimum time series allowing for building stabilised results
- Benchmarks or reference points guiding on the assessment of balance.

b) for the discussion and conclusions that might be derived from the application of the indicators:

- How to reconcile opposing information of any sub-set of the indicators, for example a positive short-term economic trend versus a negative long-term biological trend
- How to relate indicators with each other in a multi-species/multi-fleet situation, i.e. that each fleet exploits several stocks and each stock is exploited by several fleets. In particular, give guidance on how to relate Fmsy to catch composition analysis of fleet segments which have mixed catches including stocks for which Fmsy is not known
- Address the consequences of a varying time span to which indicators are applied. Results could vary depending on whether the time perspective is considered to be short run or long run. The consequences of this in relation to the indicators must be addressed.
- STECF November 2007 plenary noted that economic, as opposed to physical/technical, measures of output capacity depend upon prices. The working group should consider recommending a "costs and prices test" in the analysis of economic

indicators, i.e. a qualitative analysis to what extent cost increases or price per kilo reductions/lack of demand have affected the economic balance, rather than the availability of resources.

4. Apply indicators retained to certain fisheries/fleet segments, and provide a short discussion of the results obtained. Primarily, data from the DCR call of January 2008 shall be used. The absence of biological data from this exercise, where relevant (e.g. biomass, catches that include discards), shall be addressed by referring to other available sources (ICES, RFMOs). About 5 fisheries should be selected. The chairman shall propose a selection in advance of the meeting, having regard to the recommendations made by SGRST-SGECA 07-05. The selection shall be finally fixed in view of the data quality of data coming from the DCR January call.

5. Provide orientation for follow-up work to be done for improving the indicators. Currently, a first set of simple indicators has been developed. Based on this set the outlook of a future, perhaps more sophisticated method can be devised, be it an improvement of the indicators themselves, their relation with each other or the application of indicators to data sets (e.g. trip-related economic data). The discussion on this point shall take into consideration issues such as mixed fisheries, the outline of the fisheries-approach in the new DCR 2008, and an approach to balancing biological, economic and societal indicators.

3.3. Conservation issues

Discards

STECF is requested to review the report of the SGMOS-07-04 meeting of December 4-7, 2007 (Ispra), evaluate the findings and make any appropriate comments and recommendations.

Background:

In view of the progressive implementation, on a fishery by fishery basis, of the Community policy on discards the Commission will propose in 2008 a 'roadmap' covering all European finfish and crustacean fisheries, stretching over several years. In parallel the Commission will propose, also in 2008, a specific regulation to gradually eliminate discards in a first group of fisheries. These should be fisheries which have a real discard problem and where reductions of discards can be achieved within reasonable timeframes and at acceptable costs. In the subsequent years such measures will be proposed for all other fisheries ('roadmap').

Description of the problem:

Starting from the known or estimated levels of unwanted catch, the regulation will set an objective corresponding to the lowest possible level of discards / unwanted catches in each fishery ("maximum acceptable level"). Like in a multi-annual plan, the regulation will fix intermediate levels per year which will be gradually lowered, thus achieving the "maximum acceptable level" over a span of years. The levels fixed will serve to trigger management measures such as Real time closures or obligations to move fishing grounds. Input is needed

- on the definition of the fisheries /métiers
- on the definition of the objectives

- on the economics of the fisheries

Terms of Reference:

For each of the fisheries listed below STECF is asked to advice on the following issues:

I. Biological information:

- a) Describe the fisheries in terms of fleets, gears and mesh sizes, fishing effort, total catches and catch composition, size composition, fishing grounds (ICES sub-areas and divisions, GFCM, GSA) and seasonality, focusing in particular on unwanted catches of finfish, crustaceans and other non-commercial invertebrates and on discard rates. Discards, as a whole and by relevant components, should be expressed as a percentage of the weight and numbers of the total catch.
- b) Identify 'métiers' in each fishery and consider if they are regulated at MS level (fishing licenses, special permits, lists of vessels, etc.), and advise if the matrices proposed for the Data Collection Regulation (SGRN 0603) are workable for the envisaged measures.
- c) Define a methodology to calculate "maximum acceptable levels of unwanted catch", identify such levels for the fisheries / metiers and propose a timeframe to achieve these.
- d) Provide quantitative information on discard rates and unwanted catch of involved 3rd country fleets.
- e) Provide quantitative assessment of the different factors leading to discards in each fishery / metier, such as MLS regulations, quota restrictions, high grading, market prices etc.
- f) Provide information on how to reduce the unwanted catches and discard rates in the fisheries / metiers listed and identify monitoring needs and research requirements.
- g) Provide information on data availability, representativity, reliability and fisheries coverage, and identify relevant knowledge gaps.

II. Economic information

- a) Provide information, for each fishery / metier, regarding fishing costs and first sale prices of the main species caught or discarded, if possible by grades, for the years 2004-2006.
- b) Provide information on the relation between first sale prices and discards and between first sale prices for substitute products (fish or other) and the volume of discards.
- c) Identify questions and tasks to be addressed in Impact assessments (biological, economic and social impacts) on the subsequent legislative proposals.

Based on the results of this work the Commission will then choose a number of fisheries for the 2008 regulation. STECF will then be asked again to provide input to the Impact Assessments.

List of fisheries:

- 1 Bottom trawling in the Mediterranean:
 - a. mixed trawl fisheries on the continental shelf and slope
 - b. deep water shrimps
 - c. Norway lobster
- 2 Bottom trawling for finfish in ICES divisions VIIefghj and area VIII
- 3 Flatfish fisheries in the North Sea and the Eastern channel (ICES area IV and division VIIId)
- 4 Flatfish fisheries in the Baltic sea (areas 21-29)
- 5 Pelagic fisheries in NE Atlantic North (ICES areas V, VI, XII, XIV)
- 6 Crustacean fisheries in the Bay of Biscay and off the Iberian peninsula (ICES divisions IXa and VIII abcd)

Assessment of fish resources in the Black Sea

A working group will work in parallel to the STECF plenary and is expected to present its results to the STECF in the afternoon of 17 April.

Background:

In order to establish the TAC for certain fish stocks in the Community waters of the Black Sea, the Commission is seeking scientific advice on sprat, turbot and possibly other stocks on the basis of relevant regimes already operating in Bulgaria and Romania. To this end an STECF working group meeting is being.

Terms of Reference:

The working group is requested to:

- Evaluate the status and trends of the sprat and turbot stocks with respect to their production potential, reproductive capacity and sustainable levels of exploitation. Provide elements for establishing catch limitations in order to limit the exploitation rates in line with sustainable exploitation of the stocks;
- Up-date the description of EU fisheries exploiting these stocks, in terms of fleets, fishing gears, deployed fishing effort (capacity in N°-GT-kW, activity in days at sea, gear characteristics), catches and catch composition, size composition, discards, fishing grounds and seasonality.
- Determine whether fishing fleets of non-EU countries exploit the same stocks and provide relevant information if available;
- Identify knowledge and monitoring gaps for fisheries, stocks, vital fish habitats and other environmental aspects relevant to fisheries in the area. Suggest monitoring and scientific actions that need to be developed in the short and mid-term to fill these gaps;
- Evaluate the progress made in addressing such gaps since last year;

- Address, in particular, the gaps in data identified in the report produced by the ad-hoc working group in Constantza in 2007;
- Prepare a plan for a joint acoustic survey on the sprat stock in Bulgarian and Romanian waters.
- Review all information on the selectivity of specific mesh sizes for turbot, in relation to MLS, and provide information for a possible harmonization of minimum mesh size and MLS for turbot;
- Identify other important fisheries and stocks that may be in need of specific management measures and analyze whether the scientific basis needs to be further developed;

Mediterranean - Evaluation of SGMED-08-01 report

STECF is requested to review the report of the SGMED 08-01 meeting of March 10-14, 2008 (Lisbon), evaluate the findings and make any appropriate comments and recommendations.

Background and Terms of Reference:

The European Community is expected to establish long-term management plans (LTMP) for relevant Mediterranean demersal and small pelagic fisheries based on precautionary approach and adaptive management in taking measures designed to protect and conserve living aquatic resources, to provide for their sustainable exploitation and to minimise the impact of fishing activities on marine eco-systems.

The plans shall include conservation reference points such as targets against which measuring the recovery to or the maintenance of stocks within safe biological limits for fisheries exploiting stocks at/or within safe biological limits (e.g. population size and/or long-term yields and/or fishing mortality rate and/or stability of catches). The management plans shall be drawn up on the basis of the precautionary approach to fisheries management and take account of limit reference points as identified by scientists. The quantitative scientific assessment should provide sufficiently precise and accurate biological and economic indicators and reference points to allow also for an adaptive management of fisheries.

Stating clearly how stocks and fisheries will be assessed and how decision will be taken is fundamental for proper and effective implementation of management plans as well as for transparency and consultations with stakeholders.

Demersal and small pelagic stocks and fisheries in the Mediterranean are evaluated both at national and GFCM level; however these evaluations are often not recurring, are spatially restricted to only some GFCM geographical sub-areas (see attached reference map), covering only partially the overall spatial range where Community fishing fleets and stocks are distributed, and address only few stocks out of several that may be exploited in the same fisheries. Limited attention is also given to technical interactions between different fishing gears exploiting the same stocks.

A limited, although fundamental, scientific contribution of EU fishery scientists to the GFCM assessment process is increasingly affecting the capacity of this regional fisheries

management organization to identify harvesting strategies and control rules and to adopt precautionary and adaptive fisheries management measures based on scientific advice.

Anyhow, GFCM and most of the riparian countries consider that management measures to control the exploitation rate and fishing effort, complemented by technical measures, are the most adequate approach for multi-species and multiple-gears Mediterranean fisheries.

Nevertheless, provided that scientific advice underlines to do so, also output measures may be conceivable to manage fisheries particularly for both small pelagic and benthic fish stocks.

Coherence and certain level of harmonization between Community and multilateral framework measures are advisable for effective conservation measures and to enhance responsible management supported by all concerned Parties and stakeholders in the Mediterranean.

STECF can play an important role in focusing greater contributions of European scientists towards stocks and fisheries assessment, in identifying a common scientific framework regarding specific analyses to advice on Community plans and to be then channelled into or completed by the GFCM working groups.

STECF was requested at its November plenary session to set up an operational work-programme for 2008, beginning in the 1st quarter of 2008, with a view to update the status of the main demersal stocks and evaluate the exploitation levels with respect to their biological and economic production potentials and the sustainability of the stock by using both trawl surveys and commercial catch/landing data as collected through the Community Data Collection regulation N° 1543/2000 as well as other scientific information collected at national level.

Within this work-programme STECF is also requested to provide its advice on the status of the main small pelagic stocks and to evaluate the exploitation levels with respect to their biological and economic production potentials and the sustainability of the stock by using both echo and/or DEPM surveys and commercial catch/landing data as collected through the Community Data Collection regulation N° 1543/2000 as well as other scientific information collected at national level.

STECF should take into consideration the data that Member States have been collecting on a regular basis both via monitoring fishing activities and carrying out direct surveys . STECF, in replying at the following terms of reference, should also take into consideration chapter 7 of the 26th STECF Plenary session of 5-9 November 2007 , as well as the report of the STECF working group on balance between fishing capacity and fishing opportunities .

STECF shall contribute to identify and setup a advisory framework regarding low risk adaptive management by identifying and using appropriate risk assessment methods in order to understand where we stand with respect to sustainable exploitation of ecologically and economically important stocks and what additional management actions need to be taken.

On the basis of the STECF advice the Commission will launch official data calls to EU Member States requesting submission of data collected under the Community Data Collection regulation N° 1543/2000.

STECF is requested in particular:

- to advice whether the data availability may allow the development of a precautionary conceptual framework within which develop specific harvesting strategies and decision control rules for an adaptive management of demersal and small pelagic fisheries in the Mediterranean;

- to set up a conceptual, methodological and operational assessment framework which will allow STECF to carry out in a standardized way both stocks assessment analyses and detailed reviews of assessments done by other scientific bodies in the Mediterranean. The selected assessment methods shall allow estimating indicators for measuring the current status of demersal and small pelagic fisheries and stocks, the sustainability of the exploitation and to measure progress towards higher fishing productivity (MSY or other proxy) with respect to precautionary technical/biological reference points relating to MSY or other yield-based reference points, to low risk of stock collapse and to maintaining the reproductive capacity of the stocks;

- to set up a conceptual, methodological and operational assessment framework which will allow STECF to identify economic indicators and reference points compatible with economic profitability of the main fisheries while ensuring sustainable exploitation of the stocks in the Mediterranean;

to indicate whether age/length-based VPA or statistical catch-at –age/length methods are adequate modelling tools to estimate precautionary indicators and reference points measuring the current status and future development of multispecies/multigears Mediterranean fisheries. STECF shall also provide a conceptual and operational framework to use, if advisable, these methods for demersal and small pelagic Mediterranean fisheries;

- to identify adequate empirical modelling approaches that are adequate to estimate precautionary indicators and reference points measuring the current status and future development of multispecies/multigears Mediterranean fisheries. STECF shall also provide a conceptual and operational framework to use, if advisable, these methods for demersal and small pelagic Mediterranean fisheries;

- to identify the decision-making support modelling tools that are adequate for the Mediterranean fisheries and that will produce outputs that support sustainable use of fishery resources recognizing the need for a precautionary framework in the face of uncertainty and that may allow to provide projections of alternative scenarios for short-medium and long term management guidance;

- to provide either a qualitative or quantitative understanding of the level of precision and accuracy attached to the estimation of indicators and reference points through the different modelling tools;

- to identify which decision-making support modelling tools may help in setting up stock-size dependent harvesting strategies and respective decision control rules;

- to provide information on the data and standardised format needed for each of the decision-making support modelling tool which will be used to launch official data calls under the DCR n° 1543/2000. STECF should also indicate criteria to ensure quality cross-checks of the data received upon the calls.

Mediterranean - Management plans

Member States were expected to adopt management plans for fisheries conducted by trawl nets (demersal and pelagic), boats seines, shore seines, surrounding nets and dredges (for molluscs) within their territorial waters. Some draft plans were evaluated by the STECF at the last November plenary session. On the basis of the STECF opinion, Member States have been requested to resubmit new amended proposals of national management plans in so that STECF could evaluate them at its April plenary session.

The plans shall include conservation reference points such as targets against which the recovery to or the maintenance of stocks within safe biological limits for fisheries exploiting stocks at/or within safe biological limits (e.g. population size and/or long-term yields and/or fishing mortality rate and/or stability of catches). The management plans shall be drawn up on the basis of the precautionary approach to fisheries management and take account of limit reference points recommended by relevant scientific bodies.

The plans shall ensure the sustainable exploitation of stocks and that impact of fishing activities on marine eco-systems is kept at sustainable levels.

The Management plans may incorporate any measure included in the following list to limit fishing mortality and the environmental impact of fishing activities: limiting catches, fixing the number and type of fishing vessels authorised to fish, limiting fishing effort, adopting technical measures (structure of fishing gears, fishing practices, areas/period of fishing restriction, minimum size, reduction of impact of fishing activities on marine ecosystems and non-target species), establishing incentives to promote more selective fishing, conduct pilot projects on alternative types of fishing management techniques.

STECF is requested to review the plans so far received, to evaluate their findings, to make appropriate comments, also with respect to the elements/measures included in the management plans and to advice whether each plan contains elements that account for the state of the exploited resources, if concerned fisheries are expected to exploit main target stocks in line with their production potentials and if the plan is expected to maintain or to revert fisheries productivity to higher levels.

DOCUMENTS WILL BE PROVIDED UPON RECEPTION FROM MEMBER STATES AND PROVIDED THAT TRANSLATION TO ENGLISH IS NOT REQUIRED.

EU Action plan on sharks

The STECF is requested to give its comments on the EU Action plan on sharks.

3.4. Fishing gear technology

Characteristics of trawl fishing gear in the Mediterranean: maximum dimension of trawl nets and relationship with maximum engine power of individual vessels

The Community has an obligation to establish the maximum dimension of trawl nets in the Mediterranean. A regional workshop was convened in autumn 2007 which were attended by fishermen representatives, net-makers and gear technologists. Unfortunately no Spanish fishing gear technologists were able to attend this workshop. The main problem is that the maximum dimension received from French, Italian and Greek net-makers and scientists are coherent among themselves but much smaller than those proposed as common standard by the Spanish net-makers.

STECF is requested to give its opinion on this issue on the basis of back ground scientific technical documents received both by net-makers and fishing gear technologists.

3.5. Data Collection Framework (DCR)

Evaluation of Economic Parameters to be collected under the new DCR

STECF is requested to review the report of the SGECA 08-01 meeting of January 21-25, 2008 (Lisbon), evaluate the findings and make any appropriate comments and recommendations.

ToRs of the WG were as follows:

1. Review the list of proposed economic variables to be collected in the new DCR for the fishing, aquaculture and processing sectors presented in the ad-hoc Commission document 25
2. Propose or update stratification for:
 - regional length vessel classes
 - size category of fishing companies (see table for the fishing sector)
 - size segmentation for the enterprises (< 5 employees, 5-10 employees etc) and the segmentation of product size categories (see table for the aquaculture sector)
 - segmentation of production by species (see table for the processing industry)
3. Propose guidelines on how to estimate capital values and costs (this will based on the recommendation from the study “Evaluation of the Capital value, Investments and Capital costs” 6, the Salerno Meeting 22 and from Member States experiences, to be presented during the meeting).

Implementation of the fleet based approach

STECF is requested to review the report of the SGECA/SGRN-08-01 meeting of February 4-8, 2008 (Nantes), evaluate the findings and make any appropriate comments and recommendations.

Background:

The EC Data Collection Regulation (DCR) has been implemented since 2001 with the aim of harmonising the collection of fisheries biological and economic data across the Member States. Despite the recognised benefits brought about by the DCR, the scientific community

and managers acknowledged that the current procedure of collecting biological data on a stock basis and economic data on a fleet based did not favour the provision of relevant inputs to fishery-based management advice. The review of the DCR started in 2005 was an opportunity to integrate the fishery-based approach in the future collection of bio-economic data.

In 2001 and 2002, the European Commission requested ICES to start compiling catch-at-age data disaggregated by fishery that would be more suitable to perform fishery-based forecasts. ICES reacted by establishing in 2003 and 2004 the Study Group for the Development of Fishery-Based Forecasts (SGDFF). The two major tasks of SGDFF were to provide fleet and fishery definitions and advise on a database structure and data exchange format for the mixed-species and multi-fisheries forecasts. Since 2003, WGNSSK (the Working Group for the assessment of fisheries in the North Sea and Skagerrak) has compiled catch-at-age data disaggregated by country and by fishery, using the format defined by SGDFF, and has provided preliminary mixed-fisheries forecasts. The Advisory Committee for Fishery Management (ACFM) however, rejected the use of MTAC for advisory purposes, mostly based on the argument that the data were inadequate. Despite the concerns of ACFM, STECF has calculated mixed-fisheries catch options for the North Sea, North-Western and South-Western areas.

In 2003, the General Fisheries Commission for the Mediterranean (GFCM) defined Operational Units (OU) for the Mediterranean area. Although the OU have been primarily defined for management purposes, they will also be expected to facilitate consistent collection of bio-economic data in the Mediterranean Sea.

On the basis of these experiences, both in the ICES area and in the Mediterranean Sea, ICES PGCCDBS recommended in 2005 that a Workshop be established, under the auspices of the European Commission, to recommend a fleet and fishery segmentation to be used for the future sampling design of bio-economic data.

In this view, a Workshop on Fleet-Fishery Based Sampling was carried out by the Commission in May 2005 to agree on the concepts, the terminology and to define the process to establish the fleet segments. The Workshop proposed a generic approach to split the fishing trips into groups of similar exploitation pattern, clustered in a hierarchical tree. An equivalent multi level approach is applied to the fleets for economic sampling purpose. The economic and biological information can be then gathered harmoniously in a matrix where the fleets segments correspond to the lines and the fishing activities correspond to the columns.

This Workshop was followed by a Workshop on Small-scale fisheries to take into account their specificities (multi-species multi-gear fisheries, heterogeneity, high variability in fishery activity over the time, lack of information concerning landings, discards and effort). The consequences for defining the sampling protocols to collect information related to this fleet segment were evaluated.

One of the recommendations of the Workshop on Fleet-Fishery based sampling was that Member States tested this matrix approach on their national data in order to check its relevancy and if necessary to propose better adequate and stable national fleet segmentation for the length vessel classes.

The results would have been presented to the Regional Coordination Meetings (RCMs) by September/October 2005, so proposal for fleet segmentations at the regional level could be

done and then final decisions for all the areas could be taken during a final Workshop later at the start of 2006.

Only some Member States carried out the required analyses and were able to present results to the RCMs. Most of the Member States pointed out the difficulties in following the recommendations from the May 2005 Workshop. So, the Commission decided to postpone the final Workshop by June 2006 and to plan a specific Workshop in March 2006 in order to train the scientists involved in the Fleet Based Sampling.

During this training Workshop recommendations were made to set the regional matrix, guidelines were given to fill in the matrix and rules were established to carry out analysis in order to guarantee the relevant data will be provided to the June 2006 Workshop and the necessary analysis will be carried out by the participants in their Institutes with their national data in order to prepare the requested data for the June Workshop.

The purpose of this June Workshop was to finalize the Fleet-Based Sampling exercise, and based on the results of the analysis carried out on the national data and the information provided to the Workshop by the participants, to take final decisions about the regional fleet segments. These segments will be used in the new Data Collection Framework as key element for stratification of the regional sampling designs in order to collect information at the regional level.

In order to prepare the implementing regulation of the new Data Collection Framework there is a need to establish common operational rules for the collection of biological and economic data in the fleet-based approach context.

ToRs of the WG were as follows:

- a) Review the fleet-fishing activity matrix at both EU and regional levels
- b) Propose or update stratification for regional length vessel classes
- c) Establish a regional design and regional protocols for the collection of biological and economic data in the view of the fleet based approach and SGRN recommendations (ref. doc #22): the proposal should include suggestions for the sampling strata, the sampling intensities and precision levels wherever possible, and for criteria for allocation of the fishing activity (dominance/exclusivity)
- d) Propose operational guidelines for the implementation of the new data collection framework (both for collection of biological and economic data).

Evaluation of Data Collection programmes

STECF is requested to review the report of the SGRN-07-04 meeting of December 3-6, 2007 (Gazzada, Italy), evaluate the findings and make any appropriate comments and recommendations.

ToRs of the WG were as follows:

- Evaluate the derogations and non-conformities compared with the DCR requirements in the member states National Programmes for 2008 . This evaluation should take into account also the non-conformities in terms of oversampling and/or undersampling.
- Analysis of the outline National Programmes 2008 for Bulgaria and Romania
- Stock taking of the submission of due pilot studies. Analysis of the Cyprus discards pilot study.
- Evaluation of the situation regarding the response by MS to the call for economic data launched in 2006 and 2007
- AOB (Studies, Situation of the new DCR, New ICES Advisory System..)
- Evaluate the derogations and non-conformities compared with the DCR requirements in the member states National Programmes for 2008 . This evaluation should take into account also the non-conformities in terms of oversampling and/or undersampling.
- Analysis of the outline National Programmes 2008 for Bulgaria and Romania
- Stock taking of the submission of due pilot studies. Analysis of the Cyprus discards pilot study.
- Evaluation of the situation regarding the response by MS to the call for economic data launched in 2006 and 2007
- AOB (Studies, Situation of the new DCR, New ICES Advisory System.)

Technical amendment to the Italian data collection national programme for 2008

STECF is requested to evaluate and advise on the request by Italy regarding the harmonization of the trawl sampling gear used in the GRUND scientific trawl-survey with that used for the MEDITS scientific trawl survey".

Harmonization of protocols of national acoustic surveys for small pelagic stocks in the Mediterranean

STECF is requested to review the report of an ad-hoc meeting on future "MEDIAS" acoustic survey (Athens, 25-26 February 2008), evaluate the findings and make appropriate comments and recommendations. (Report to be found in the document section of PLEN-08-01 web site).

4. INFORMATION FROM THE COMMISSION – ORGANISATIONAL MATTERS

4.1. Expert reimbursement

The secretariat informed the Committee that the forms for expert reimbursement for all remaining 2007 STECF meetings were sent to DG MARE by end February 2008. DG MARE is in the process of arranging the remaining 2007 reimbursements. The secretariat reminded the experts that indemnities and travel plus daily allowances are paid on different budget lines by the Commission meaning that experts receive two separate payments for each meeting. These payments are not necessarily done at the same time. Until now, five STECF meetings have taken place in 2008: STECF Bureau-08-01 (January), SCEGA-08-01 (January), SCEGA/SGRN-08-01 (February), SGRST-08-01 (February), and SGMED-08-01 (March). The forms for reimbursement of experts for the first four of these meetings were sent to DG MARE in the second week of April. The forms of the SGMED-08-01 meeting will be processed by 25 April. A few files for reimbursement are pending the provision of documents by the experts. The timely provision of documents by the experts improved after the introduction of the new rules for reimbursement meaning that experts have 30 days to provide the documents needed. The secretariat advised that a new functional mailbox has been set up (stecf-payments@jrc.it) where experts should send any forms to they were unable to provide to the Secretariat during the relevant meeting. This new functional mailbox aims to further increase the efficiency of the Secretariat's administrative work. To summarize, huge process has been made to solve the reimbursement backlog and to reach an appropriate timing of expert reimbursement.

4.2. STECF contact point in DG MARE

In the first few months of 2008 DG FISH underwent a restructuring process including a change of name to DG MARE. The new structure came into force in April 2008 and the reorganisation has resulted in a change in the main STECF focal point in DG MARE. For approximately 10 years, Franco Biagi has been the main focal point of the STECF in the Commission. His contribution to the work of the Committee has been immense and STECF wishes him well in his new role within DG MARE. Patrick Daniel will now assume responsibility as the main focal point for STECF within the Commission.

4.3. Logistics and other organisational matters

DECLARATION OF COMMITMENT AND INTEREST: At the 1st plenary meeting (STECF/PLEN-08-03) of the new STECF, members were requested by the Commission to provide their CVs and to sign declarations of commitment, interest, and confidentiality. CVs and signed declarations have been published on the STECF web site. External experts invited to the STECF plenary meeting were also requested to sign declarations of interest. Such declarations were annexed to the report. This is also the procedure for STECF subgroup meetings. The Commission reminded the Committee that members of STECF and invited experts participate in a personal capacity as independent experts and not as representatives of Organisations or Member States. Commission financial rules request that reimbursements of experts are done on their personal bank account and not on the bank account of their research Institute/Administration. Experts are requested to fill in the reimbursement form accordingly.

RESIGNATION OF HANS-JOACHIM RAETZ FROM THE STECF: Hans-Joachim Raetz joined the European Commission's Joint Research Centre (JRC) as Seconded National Expert in March 2008 and consequently resigned from the STECF. The Commission will contact all experts on the official STECF reserve list asking for applications to be a member of the STECF from experts with an equivalent professional profile.

5. BIOECONOMIC ISSUES

5.1. Long-term management plan for anchovy in the Bay of Biscay

Background

The Commission intends to make a proposal for a long-term management plan for the anchovy based on the following objectives:

1. to ensure the exploitation of the stock at high yields consistent with maximum sustainable yield;
2. to guarantee the stability of the fishery, as far as possible, and with a low risk of stock collapse.

In 1999, the Commission entrusted STECF to produce an extended risk analysis showing, under different multi-annual management strategies, the consequences on the sustainability of the resource expressed in terms of risk of collapse and on the total annual yield. The evaluations included a test of robustness to a wide range of choices in the underlying biological parameters such as stock-recruitment relationships and fleet harvest behaviour models to simulate different responses of the fleet to resource availability.

In November 2007, the Commission has produced non-paper gathering different elements that should be considered and discussed with Member States, the scientific community and the SWW RAC. These should be thoroughly analysed before they are incorporate into the long-term plan.

Accordingly, a working group was convened to work in parallel to the STECF plenary and the results were presented to the STECF on the morning of 18 April.

Terms of reference

1. Having in mind the two basic objectives of the long-term management plan and the work produced in 1999, STECF is requested to provide an updated advice on the strategy to follow.

In case the new knowledge implies significant changes, recommend adaptations as appropriate.

2. Given a possible stock recovery under the long term proposal, for each Member State, what economic impacts (e.g. costs, revenues) can be expected considering the two scenarios described in Commission's non-paper:

- a. strategy with relatively higher TAC levels but higher collapse risks,
- b. strategy with relatively lower TAC levels and less frequent collapse risks.

3. Given a possible stock recovery under the long term proposal, for each Member State, what social impacts (e.g. employment) can be expected considering the two scenarios described in Commission's non-paper:

- a. strategy with relatively higher TAC levels but higher collapse risks,
- b. strategy with relatively lower TAC levels and less frequent collapse risks.

STECF Observations

Approach taken by STECF Working Group (WG)

The group evaluated the impact of a number of harvest control rules (HCR) on the stock using two operating models: an age-structured and a two-stage biomass fishery models. The socio-economic impact was evaluated by means of simple algorithms developed during the meeting that used the output of the fishery models.

Management Cycle

The management cycle has traditionally gone from January to January, but since 2006, with the fishery closures, the management advice is given in June concerning the catch options for the period July to June next year. This is linked to the fact that the direct surveying of the stock by acoustics and the Daily Egg Production Method (DEPM) are the only scientific knowledge forming the management advice and used to take decisions. For this reason the Management plan considered by the WG is based on a annual management cycle from July to June. There is a TAC which is determined on the basis of the results of surveys that take place in May. These surveys evaluate the existing spawning stock biomass (SSB). Although the fishery operates throughout the year there is no indication of the incoming year class caught by the fishery in the 1st semester at the time of setting the TAC.

Surveys in autumn to evaluate the juveniles as predictor of next coming recruitment at age 1 are still in a testing phase. For this reason they are not taken into account in the formulation of the management strategies tested. However if those surveys would become operative, their inclusion in the knowledge base for decisions would imply revising the current basis for the Long Term Management plan.

Management Strategy Evaluation (MSE)

Model Conditioning

Fishery model. The base case fishery model is a projection formulation for the two stage biomass model used by ICES. This model was conditioned on the results from the stock assessment corresponding to ICES advice 2007. An alternative age structured model used for verification, is based on a seasonal multi-fleet integrated catch at age assessment as the one used in ICES 2005. This model was updated up to 2007 in order to provide starting conditions for the current simulations.

The data was fitted to a number of stock and recruitment models and those were evaluated using AIC. This test indicated that either model was plausible. Recruitment was therefore

generated using a Ricker model and sensitivity to a hockey –stick and to low recruitment scenario was tested.

The dynamics were simulated for 10 years and run for 1000 iterations. The projection period was considered sufficient given the short-lived nature of the stock.

Economic model. The model was conditioned on data collected by the DCR and additional data provided by Spain and France. Data consisted of landings weight and value, average annual price, full time employment (FTE) but only relative to the time at sea. Revenue and variable costs.

Some data are missing such as fixed cost (France) capital cost (Spain). Employment data only relates to the on-board full time equivalent for both Spain and France.

Harvest Control Rules

Two basic strategies were evaluated with respect to what proportion of the available stock could be harvested:

- Rule 1. constant proportion above an escapement and
- Rule 2. constant proportion

The corresponding rules follow:

$$\text{Rule 1. } TAC_y = \begin{cases} 0 & \text{if } S\hat{S}B_{y-1} \leq B_{lim} \\ \gamma(S\hat{S}B_{y-1} - B_{lim}) & \text{if } S\hat{S}B_{y-1} > B_{lim} \end{cases}$$

$$\text{Rule 2. } TAC_y = \begin{cases} 0 & \text{if } S\hat{S}B_{y-1} \leq B_{lim} \\ \gamma \frac{(S\hat{S}B_{y-1} - B_{lim})}{(B_{pa} - B_{lim})} S\hat{S}B_{y-1} & \text{if } B_{lim} < S\hat{S}B_{y-1} < B_{pa} \\ \gamma S\hat{S}B_{y-1} & \text{if } S\hat{S}B_{y-1} \geq B_{pa} \end{cases}$$

where $S\hat{S}B_{y-1}$ is the biomass estimated from the spring surveys and γ is a constant parameter to be set. The biological reference points B_{lim} and B_{pa} correspond to 21,000 and 33,000 tonnes respectively.

The performance of each rule was tested for γ values between 0 and 1 by steps of 0.1.

For each of the strategies outlined, the HCR with and without a ceiling equal to 33,000 tonnes, (the historically fixed level of TAC set to this fishery) and, with and without a minimum TAC corresponding to the smallest catch that allows the fishery to remain

economically viable (at 7,000 tonnes, as pointed out by the SWW RAC and confirmed in the economic analysis of this report), were constructed.

The Economic Model

Main components:

a) price (P) function

$$\text{Log}(P)=a -b*Y_t+g*SEM_t+ d *SHOCK_t+u_t$$

where Y is yield, SEM is the semester (half of the year) which encompasses fish size in the catch and quality and SHOCK is a dummy variable which results in exceptional price increase.

b) production function for each fleet (Cobb Douglas)

$$Y_{ti} = q_i \text{SSB}_t^a \text{NB}_{ti}^b + u_t \quad (a+b=1)$$

$$(Y_{ti}/\text{SSB}_t)=q\text{NB}_{ti}+u_t$$

where NB is number of vessels.

The assumptions made in the equation above allow estimating a different catchability coefficient for each fleet (q_i).

c) Costs (c) were assumed constant over time but differing between fleets.

The total costs values (TC) have been divided in fixed cost (FC) and variable costs (VC), but capital cost has not been provided to the group, results have to take these issues into account.

d) Profits are computed in the following way

$$\text{Profits}_{it} = (p_{it} - \text{AVC}_{it}) * Y_{it} - \text{FC}_i$$

Variable costs are useful to establish minimum TAC required to maintain the fleet in the very short run, which in the worst situation, would imply losing no more than FC. Since this situation is not stable, in the long run (the fleet would disappear), the relevant parameter to have in mind is the economic break even (EBE_{it}), which have been calculated as follows.

$$Y_{\text{EBE}i} = \text{median}(\text{FC}_i / (p_{it} - \text{AVC}_{it})) \Rightarrow \text{QUOTA}_{\text{EBE}i} = \text{FC}_i / (p_{it} - \text{AVC}_{it})$$

Catches were allocated to countries on a half-year basis. The allocation was based on the mean fraction of the catch taken by each Country during the period 1992-2004 (constant allocation). However, this is expected to change given future implementation of quotas. A likely projection of the allocation of catches to countries is the draft under discussion at the pelagic committee of the Southern RAC (variable allocation relative to the TAC level). The STECF WG intends to evaluate the socio-economic impact of the variable allocation.

Social impacts

Given the limited time and data for doing the assessment, the group has only made a first attempt to cover this issue.

STECF Recommendations

STECF notes that despite the excellent progress made by the WG, it proved impossible to finalize the WG report in time for a full evaluation during the STECF 08-01 plenary meeting. There are a number of issues that could usefully be undertaken in order to fully address the Terms of Reference. STECF further notes that the group has not yet been able to make any significant progress with regard to ToR iii, relating to the social impact of the harvest control rules and that further work is required on the economic model. An evaluation of alternative control measures such as closed areas was suggested by the WG. The Commission may wish to consider whether such an evaluation is required, although STECF notes that it is unlikely to be achieved by the working group in the short-term.

STECF notes that in the HCRs which have been investigated by the WG, the TAC is set on the basis of the SSB at the start of the fishing season (1 July) and without prior knowledge of the size of the incoming year class (age 1, 1 January) which constitutes a major part of the catch in the spring (2nd half of the TAC year). STECF notes that this could result in a mismatch between the TAC available and realised catch rates if a large year-class were to occur following the implementation of a low TAC or visa versa. STECF suggests that the WG should investigate the likelihood of such an event occurring.

As a general comment to the simulations tests of the HCR, STECF repeats its previous advice that the assessment model used in the HCR simulations should be the same as the assessment model that is used to derive the management advice. In addition, the WG verified the results from the biomass operating model by using an age-structured model. STECF notes that for the case of Bay of Biscay anchovy, the model currently used to provide advice to managers is a Bayesian model, which prevents its use in the HCR simulations because of too great a computational burden for the time available to the group. STECF suggests that one way to simulate the dependencies between the HCR simulation results and the Bayesian assessment accuracy, would be for the WG to use the estimates of bias from previous Bayesian stock assessments. STECF suggests that given autocorrelation in the residuals in the biomass assessment that is taken into account in the simulations.

STECF supports the long term aim of the WG to include the economic parts of the model in the projection simulations. This would provide probability distributions for economic variables, which may improve the use of simulation results in stakeholder negotiations.

Taking into account the comments above, STECF therefore considers that the report of the group is a work in progress and as a result, was unable to draw definitive conclusions on the WG's findings. To progress the work of the group and address the outstanding issues outlined above, STECF therefore recommends that a follow-up meeting be convened and a final consolidated report be prepared for evaluation by the STECF ahead of its summer plenary, which is to be held in Helsinki from 7-11 July 2008.

STECF notes that the report of the April 2008 WG meeting on long-term management of Bay of Biscay anchovy is to be presented to a meeting of the South-western Waters Regional Advisory Council (SWWRAC) during May 2008. **STECF insists** that it should be made clear to the SWWRAC that any results or conclusions presented are to be considered as preliminary findings of the Working Group and not as STECF conclusions or opinion. To avoid any

potential confusion on this point, STECF recommends that the following disclaimer be added to the title page of the WG report and that it should also be added as a footer to all pages in the document: “This report has not yet been evaluated by the STECF. The findings are to be considered preliminary and should in no way be interpreted as the opinion of the STECF”.

5.2. Balance between capacity and exploitation

STECF is requested to review the report of the SGRST-08-01 meeting of February 19-22, 2008 (Brussels), evaluate the findings and make any appropriate comments and recommendations.

Terms of reference

1. Undertake a literature review concerned with assessing overcapacity in European fisheries. This task will be frontloaded and will be presented at the start of the meeting.

2. Further study which biological/technical indicators should be recommended to assess the balance question. The biological indicators so far retained by the previous working group (SGECA-SGRST 07-05) are: Ratio between current and target fishing mortality, Catch per unit of effort, Ratio between catch and biomass. Since the balance between capacity and exploitation is to be assessed at national level, these indicators should ideally be fleet and country specific.

a) Biological data are available at Community (region) level and – at least for fisheries shared among Member States -, not at Member States level. The working group is requested to advise ways of addressing this issue. One avenue addressed in the report of the previous working group (p. 7) is to look at MS quotas agreed at Community level where those are restricting in nature, i.e. are being (almost) exhausted before the end of the season or even overshoot, and representing a predominant interest of the fleet concerned. Examining the quota utilisation rates by fleets might show a trend over time. A further trend might be established by the "regional view" coming from e.g. a targeted fishing mortality in stocks concerned, in particular when these are not subject to the TAC and quota system;

b) STECF summer 2007 plenary gave a list of indicators that might be considered for the desired simple approach to expressing the balance. Among them was the capacity utilisation rate expressed in real fishing days/maximum possible fishing days. The previous working group explored this indicator and discussed the lack of individual vessel data from DCR calls, and the problem of comparing vessel behaviour within not fully homogenous fleet segments. The working group is requested to finalise this assessment.

3. Draft guidelines for practical steps to improve the reporting on the balance between fishing capacity and fishing opportunities by Member States, based on the preference list of "balance-indicators" already identified by the SGECA-SGRST working group 07-05 and conclusions on point 2 above. The indicators so far identified by the previous working group are:

- Economic indicators: Return on investment, Break-even revenue/current revenue;
- Biological indicators: Ratio between current and target fishing mortality, Catch per Unit of effort, Ratio between catch and biomass,

- Social indicators: Gross value added, evaluation of crew wages

The guidelines should provide the following:

a) for each indicator

- A short discussion of each indicator, in particular its strengths and weaknesses (concerning the balance question in general and usability in different fisheries)
- The data requirements and calculation method
- a recommended minimum time series allowing for building stabilised results
- Benchmarks or reference points guiding on the assessment of balance.

b) for the discussion and conclusions that might be derived from the application of the indicators:

- How to reconcile opposing information of any sub-set of the indicators, for example a positive short-term economic trend versus a negative long-term biological trend
- How to relate indicators with each other in a multi-species/multi-fleet situation, i.e. that each fleet exploits several stocks and each stock is exploited by several fleets. In particular, give guidance on how to relate Fmsy to catch composition analysis of fleet segments which have mixed catches including stocks for which Fmsy is not known
- Address the consequences of a varying time span to which indicators are applied. Results could vary depending on whether the time perspective is considered to be short run or long run. The consequences of this in relation to the indicators must be addressed.
- STECF November 2007 plenary noted that economic, as opposed to physical/technical, measures of output capacity depend upon prices. The working group should consider recommending a "costs and prices test" in the analysis of economic indicators, i.e. a qualitative analysis to what extent cost increases or price per kilo reductions/lack of demand have affected the economic balance, rather than the availability of resources.

4. Apply indicators retained to certain fisheries/fleet segments, and provide a short discussion of the results obtained. Primarily, data from the DCR call of January 2008 shall be used. The absence of biological data from this exercise, where relevant (e.g. biomass, catches that include discards), shall be addressed by referring to other available sources (ICES, RFMOs). About 5 fisheries should be selected. The chairman shall propose a selection in advance of the meeting, having regard to the recommendations made by SGRST-SGECA 07-05. The selection shall be finally fixed in view of the data quality of data coming from the DCR January call.

5. Provide orientation for follow-up work to be done for improving the indicators. Currently, a first set of simple indicators has been developed. Based on this set the outlook of a future, perhaps more sophisticated method can be devised, be it an improvement of the indicators themselves, their relation with each other or the application of indicators to data sets (e.g. trip-related economic data). The discussion on this point shall take into consideration issues such

as mixed fisheries, the outline of the fisheries-approach in the new DCR 2008, and an approach to balancing biological, economic and societal indicators.

STECF Observations

STECF compliments the SGRST-SGECA 08-01 working group on the progress achieved in developing biological, technical and economic indicators relating to the balance between fleet capacity and fishing opportunities¹. STECF considers the output of the working group to be a significant contribution to the future approach to be used by Member States when producing their annual reports about capacity and exploitation.

The current list of indicators could be used to gain insight into conservation, structural and economic factors influencing the sustainability and profitability of fisheries.

STECF stresses that careful interpretation of the proposed indicators is required, giving consideration to the following issues:

- The indicators should always be looked at in combination:
 - While it is clear the biological indicators show the level of under/over exploitation of the fisheries resource, they give no information about the economic sustainability of the fishing businesses.
 - Economic indicators, when applied in the short term, do not give good information about the sustainability of the exploitation rates
 - For example, economic performance, measured in terms of Return on Investment or Gross Value Added, may be good but be reliant upon levels of catches that exceed target levels, due to poor management and/or enforcement. Conversely, economic performance may be poor even though catches do not exceed target levels. The significance of the management system in place must be stressed here.
- The indicators do not by themselves provide any solution or way forward. The indicators may give an indication of technical or economic overcapacity, but further analysis would be needed to reveal the causes for this. Thus STECF endorses the recommendation made by the subgroup that MS should attempt to identify the factors causing any major annual changes or strong multi-annual trends in the indicators as part of their reporting requirements.
- The evaluation by means of a simple traffic light system is generally recognized by STECF as a useful, simple instrument to interpret each balance indicator individually and collectively. However, target reference points have still to be properly defined for most indicators, so evaluation of current results may prove difficult. Moreover, these reference points will also depend to a large extent on the management objectives, and will thus be hard to define.

STECF has the following specific comments on the use of the indicators:

F/Ft:

¹ In the TOR and the report the terms fishing opportunities, exploitation and fish stocks are used to address the question of balance. STECF stresses that the question of balance should be related to fishing opportunities.

In case of multi-species multi-gear fisheries this indicator might be very hard to estimate, since for many species, no agreed F_t values are available yet. Thus, there is still a lot of work to be done to estimate $F_{targets}$ for many stocks.

STECF notes that the F indicator only is meaningful if a target F is defined for the segment for which the indicator is calculated. An ' F ' indicator calculated for a Member State as a whole reflects whether the Member State's fishing vessels in total are generating a fishing mortality that is above or below the target fishing mortality allocated to that Member State. A partitioning to individual fleet segments as proposed by the working group requires that the target fishing mortality for the Member State is allocated to the fleet segments and the indicator for a segment is calculated as the fishing mortality generated by the segment divided by the target fishing mortality allocated to the segment. The STECF notes that the figures given in section 8 (calculation method is described in table 7.1 row 14) of the Group's report are not calculated in accordance with this method and should be revised.

Current/Break even revenue

There seem to be inconsistencies in the definition of this indicator in this report and the report from the previous working group (SGRST-SGECA-07-05). Therefore, the definition is not clear and interpretation of the results might be misleading. STECF recommends that it should be clearly defined which costs items should be included in this indicator. STECF proposes that capital costs should be excluded. Thus, this indicator is an indication of the short term profitability of the fishery.

ROI

Calculating and evaluating return to capital or Return on Investment (ROI) as an indicator requires some care. Calculation depends upon estimation of the value of physical capital employed in the fishery and hence on the methodology used in order to do this. Evaluating the indicator then depends upon assumptions about interest rates and hence the opportunity cost of capital (which should be excluded from the calculation of the indicator).

STECF notes that the harmonised approach proposed in the new DCR to estimating the capital value of fishing vessels and the opportunity costs of this capital should help here. Nevertheless caution should be used in interpreting this indicator when making comparisons between comparing MS.

STECF Recommendations

STECF recommends the Commission should clarify what policy objectives the indicators are intended to serve. For instance, are they designed to identify failings in current fisheries management and enforcement or are they intended to lead to a new approach of capacity/effort management? Future STECF actions within this issue would benefit from this clarification.

STECF strongly recommends that a common methodology to calculate the indicators should be agreed.

STECF considers that further investigation of the balance between capacity and fishing opportunities is needed. The working group proposed the use of bio-economic models to identify target levels for the different indicators and to better understand issues and causal factors influencing balance between fleet capacity and fishing opportunities.

STECF recommends that the July plenary should consider future steps, based on the literature review that is currently being undertaken, the two reports produced by the WG and the annual reports on the state of Member State fishing fleets. With these documents available, problems and concerns can be identified and included in future work.

STECF recommends that MSs include in their annual reports, absolute values and time trends of all indicators reported, in order to present a more complete picture, which could aid understanding of any issues leading to an undesirable imbalance between fleet capacity and fishing opportunity.

6. CONSERVATION ISSUES

6.1. Discards

Introduction and Background

Catch of unwanted organisms and their subsequent discarding is significant in several European fisheries, as shown in a report by STECF from November 2006². Such practices are a wasteful use of resources and the sea. From an economic perspective it is wasteful because discarded fish is equal to lost future fishing opportunities. From a perspective of ecological sustainability it is wasteful because the catching of unwanted animals has a negative impact on the marine ecosystem without benefits to society.

In order to tackle the problem of discards in European Fisheries the European Commission has issued a "Communication on a policy to reduce unwanted by-catches and eliminate discards European fisheries"³ in March 2007. The Communication aims at gradually reducing unwanted by-catch and eliminating discards in all European fisheries. The Commission therefore intends to make some concrete proposals in this respect in 2008, and has asked the Scientific, Technical and Economic Committee for Fisheries (STECF) to provide a first assessment of this approach and of current and past discarding practices in 6 fisheries (see chapter 3.3 of terms of reference).

Terms of reference

STECF is requested to review the report of the SGMOS-07-04 meeting of December 4-7, 2007 (Ispra), evaluate the findings and make any appropriate comments and recommendations.

Background:

In view of the progressive implementation, on a fishery by fishery basis, of the Community policy on discards⁴ the Commission will propose in 2008 a 'roadmap' covering all European finfish and crustacean fisheries, stretching over several years. In parallel the Commission will propose, also in 2008, a specific regulation to gradually eliminate discards in a first group of

² http://ec.europa.eu/fisheries/cfp/management_resources/conservation_measures/pdf/stecf_2006_discards_report.pdf

³ COM(2007)136 final

⁴ as outlined in COM(2007)136 final ("Communication on a policy to reduce unwanted by-catches and eliminate discards in European fisheries")

fisheries. These should be fisheries which have a real discard problem and where reductions of discards can be achieved within reasonable timeframes and at acceptable costs. In the subsequent years such measures will be proposed for all other fisheries ('roadmap').

Description of the problem:

Starting from the known or estimated levels of unwanted catch, the regulation will set an objective corresponding to the lowest possible level of discards / unwanted catches in each fishery ("maximum acceptable level"). Like in a multi-annual plan, the regulation will fix intermediate levels per year which will be gradually lowered, thus achieving the "maximum acceptable level" over a span of years. The levels fixed will serve to trigger management measures such as Real time closures or obligations to move fishing grounds. Input is needed

- on the definition of the fisheries /métiers

- on the definition of the objectives

- on the economics of the fisheries

List of tasks:

For each of the fisheries listed below STECF is asked to advise on the following issues:

I. Biological information:

- a) Describe the fisheries in terms of fleets, gears and mesh sizes, fishing effort, total catches and catch composition, size composition, fishing grounds (ICES sub-areas and divisions, GFCM, GSA) and seasonality, focusing in particular on unwanted catches of finfish, crustaceans and other non-commercial invertebrates and on discard rates. Discards, as a whole and by relevant components, should be expressed as a percentage of the weight and numbers of the total catch.

- b) Identify 'métiers' in each fishery and consider if they are regulated at MS level (fishing licenses, special permits, lists of vessels, etc.), and advise if the matrices proposed for the Data Collection Regulation (SGRN 0603) are workable for the envisaged measures.

- c) Define a methodology to calculate "maximum acceptable levels of unwanted catch", identify such levels for the fisheries / métiers and propose a timeframe to achieve these.

- d) Provide quantitative information on discard rates and unwanted catch of involved 3rd country fleets.

- e) Provide quantitative assessment of the different factors leading to discards in each fishery / métier, such as MLS regulations, quota restrictions, high grading, market prices etc.

- f) Provide information on how to reduce the unwanted catches and discard rates in the fisheries / métiers listed and identify monitoring needs and research requirements.

- g) Provide information on data availability, representativity, reliability and fisheries coverage, and identify relevant knowledge gaps.

II. Economic information

- a) Provide information, for each fishery / métier, regarding fishing costs and first sale prices of the main species caught or discarded, if possible by grades, for the years 2004-2006.
- b) Provide information on the relation between first sale prices and discards and between first sale prices for substitute products (fish or other) and the volume of discards.
- c) Identify questions and tasks to be addressed in Impact assessments (biological, economic and social impacts) on the subsequent legislative proposals.

Based on the results of this work the Commission will then choose a number of fisheries for the 2008 regulation. STECF will then be asked again to provide input to the Impact Assessments.

List of fisheries:

- 1. Bottom trawling in the Mediterranean:
 - a. mixed trawl fisheries on the continental shelf and slope
 - b. deep water shrimps
 - c. Norway lobster
- 2. Bottom trawling for finfish in ICES divisions VIIefghj and area VIII
- 3. Flatfish fisheries in the North Sea and the Eastern channel (ICES area IV and division VIIId)
- 4. Flatfish fisheries in the Baltic sea (areas 21-29)
- 5. Pelagic fisheries in NE Atlantic North (ICES areas V, VI, XII, XIV)
- 6. Crustacean fisheries in the Bay of Biscay and off the Iberian peninsula (ICES divisions IXa and VIII abcd)

Throughout the report each fishery is referred to using the numeric identifier above e.g. Fishery 2 refers to 'Bottom trawling for finfish in ICES divisions VIIefghj and area VIII'.

STECF Observations

STECF reviewed the report of the SGMOS-07-04 Working Group on discards, noting that a considerable amount of information had been compiled in the short time available.

STECF notes that the terms of reference were extensive and, with the benefit of hindsight, too demanding for the time available for the Expert group meeting. As a consequence, the working group was unable adequately to address most of the tasks. Items a and b of Biological Information on descriptions of the fisheries and identification of métiers were reasonably well addressed, but the Group was unable to provide adequate and useful information on items c – g.

It is also noted that the ToR were not helpfully organised, since questions relating to markets and how to change human behaviour were included under the heading of Biological Information.

With regard to Economic items, the group was unable to provide any comprehensive quantitative information in relation to items a and b, but made some useful suggestions with regard to item c.

In general, the quantitative information on discarding rates presented in the report is incomplete. They are presented in two ways, the mean value from sampled trips and the aggregated value over all sampled trips, in terms of weight and numbers, but not in absolute discard levels. This was not possible because the group was not able to work with landings and/or effort data for each of the fisheries identified in the call but rather just the landing data for the sampled trip. Furthermore, the fisheries identified in the ToR for the group did not match the definitions of fisheries in the DCR.

Whilst the way in which the reported discard rates were derived is explained in the introduction to the report, the derivation of the specific values for discards and discard rates that appear in the tables associated with each of the fisheries described in the report is not adequately documented. As a result it is not clear whether they are representative of the true discard quantities and discard rates in the fisheries concerned. Further work is required on these issues.

The text associated with many of the tables presented in the report highlights the uncertainty associated with the values presented. Therefore, these estimates should only be considered as indicative of the level of discarding for those trips that were sampled and figures presented in this report may not be reliable estimates of discards for the fishery as a whole. In addition STECF is unable to objectively judge which of the estimates presented in the report can be considered reliable.

STECF observes that selection of fisheries for first action to reduce discarding should be based not only on scientific advice but also on the values of society.

The Sub-group has clearly had to wrestle with a number of issues relating to data availability, data quality, database problems, sampling variability and sampling coverage of the various fisheries described. The exercise has exposed valid reasons, both logical and statistical, why deriving reliable discard estimates is problematic.

STECF Conclusions and Recommendations

It is obvious that many of the estimates of discards rates are based on very few observations and may be biased.

STECF concludes that the gaps in the discards data, especially in terms of discards rates for all métiers exploiting a stock, make the overall estimates of discards by species very uncertain.

STECF concludes that the discard estimates in the working group report should not be considered representative of the level of discarding in the fisheries identified.

STECF recognises that the Commission wants to move towards action, even if only on a pilot basis, on the issue of discarding.

STECF cannot say with certainty, based on empirical evidence, which fisheries are suffering the worst impacts from unwanted catches and discards. STECF can nevertheless identify

several fisheries which are certain to be among the highest priority fisheries and therefore can be considered candidates for further analysis and action.

In support of the Commission's desire therefore, STECF recommends, that the working group meeting in June 2008 should address the important ToR questions that were not answered by this working group in relation to a few selected case study fisheries.

In order to select the case study fisheries, STECF has applied the following criteria:

1. availability of data to support estimates of discarding and to inform evaluation of the causes and drivers for discarding practices
2. geographical spread around the EU
3. scale of discarding problem, as assessed by earlier work (rather than based on the estimates of discarding presented in this working group report)
4. presence of existing understanding about the more obvious causes of discarding

Based on these criteria, STECF recommends the following case study fisheries for the June working group:

1. 80-99mm beam trawl fisheries in the North Sea
2. 70-99mm otter trawl fishery in ICES divisions VIIefghj and VIIIab
3. 70mm otter trawl fishery in ICES divisions VIIIc and IXa
4. 40 mm otter trawl mixed species fishery in the Mediterranean.

STECF recommends that the Terms of Reference for the working group should be divided into the following outline structure, in relation to each of the specific case study fisheries:

1. Data and other information pertaining to the scale and causes of discarding; including biological, economic and technical data. Requirements for existing information and data should be agreed and data compiled in advance of the working group. It is not the intention of STECF that there should be further analysis of raw data to create estimates of discard levels in the next working group.
2. Problem analysis and definition: identify the scale and scope of discarding (based on comprehensive empirical evidence) and identify and evaluate the causes and drivers of discarding.
3. Potential solutions: identify and evaluate potential routes to achieving the desired state with regards to discards (the objectives of reduced / minimum discard volumes) in relation to case study fisheries.

With regard to the specific aims in relation to discard reduction, the Commission requested the STECF to establish methodologies to identify the lowest possible discard levels. STECF suggests that, for the case study fisheries, the working group should take this as the technically lowest possible level of discards within the limits of the current fleet characteristics and structure, and overall management regime. STECF notes that in the longer

term, vessels and management structures could potentially be designed differently in order to achieve even further reductions in discarding.

6.2. Assessment of fish resources in the Black Sea

A working group worked in parallel to the STECF plenary and presented its results to the STECF in the afternoon of 17 April. The Black Sea working group will continue its work parallel to the SGMED-08-03 meeting in June 2008.

Background

In order to establish the TAC for certain fish stocks in the Community waters of the Black Sea, the Commission is seeking scientific advice on sprat, turbot and possibly other stocks on the basis of relevant regimes already operating in Bulgaria and Romania. To this end an STECF working group meeting is being.

Terms of reference

The working group was requested to:

- Evaluate the status and trends of the sprat and turbot stocks with respect to their production potential, reproductive capacity and sustainable levels of exploitation. Provide elements for establishing catch limitations in order to limit the exploitation rates in line with sustainable exploitation of the stocks;
- Up-date the description of EU fisheries exploiting these stocks, in terms of fleets, fishing gears, deployed fishing effort (capacity in N°-GT-kW, activity in days at sea, gear characteristics), catches and catch composition, size composition, discards, fishing grounds and seasonality.
- Determine whether fishing fleets of non-EU countries exploit the same stocks and provide relevant information if available;
- Identify knowledge and monitoring gaps for fisheries, stocks, vital fish habitats and other environmental aspects relevant to fisheries in the area. Suggest monitoring and scientific actions that need to be developed in the short and mid-term to fill these gaps;
- Evaluate the progress made in addressing such gaps since last year;
- Address, in particular, the gaps in data identified in the report produced by the ad-hoc working group in Constantza in 2007;
- Prepare a plan for a joint acoustic survey on the sprat stock in Bulgarian and Romanian waters.
- Review all information on the selectivity of specific mesh sizes for turbot, in relation to MLS, and provide information for a possible harmonization of minimum mesh size and MLS for turbot;
- Identify other important fisheries and stocks that may be in need of specific management measures and analyze whether the scientific basis needs to be further developed;

STECF Observations and Recommendations

The STECF WG on Black Sea fisheries began its work with a review and compilation of available data in preparation for stock assessments of the overall Black Sea populations of sprat and turbot. STECF notes that this will be the first time that international stock assessments have taken place since 1995 (Prodanov et al. 1997). The report of this first stage will be finalised in mid-May 2008 and the follow up assessment meeting will take place in June 2008.

STECF considers that the WG made very good progress in reviewing the data and compiling input data matrices for stock assessment of sprat and turbot.

The preliminary review showed that data on sprat are extensive and reliable, particularly in the period up to 1993. Data provided by Black Sea countries on catches, age compositions, individual weight at age and tuning data were reviewed and compiled for 1994-2007. These data will facilitate an age-structured stock assessment of Black Sea sprat using ICA and XSA during the WG meeting in June 2008. STECF notes that tuning data for this more recent period (1994-2007) are of slightly lower quality and also that some data still need to be compiled (the deadline for this 1st May 2008).

With respect to improving the quality of the tuning data, STECF notes that cooperative research surveys of juvenile abundance (NIMRD in Romania and Bulgaria) and acoustic surveys (IO-BAS in Bulgaria and Romania) for sprat are being considered and that there are proposals to seek funding under the EC DCR. STECF recommends that these survey initiatives are supported and that funding is provided for surveys employing techniques appropriate for the sprat in this area. STECF considers that development of fishery independent indices for this stock will enhance the assessment process and that their early commencement should be encouraged.

STECF notes that the Working Group considers the data for turbot to be less reliable than that for sprat. Since 1985 under-reporting of the catch may have increased. Data provided by the Black Sea countries on catches and age composition from the commercial fisheries and trawl survey were reviewed for 1989-2007. The catch and survey data will be utilised in age-structured and dynamic surplus models during the WG meeting in June 2008. STECF notes that some data still need to be compiled (the deadline for this is 1st May 2008) and furthermore, suggests the WG should attempt to assess the magnitude of unreported catch and include such estimates in the stock assessment.

STECF notes that the WG identified a number of information gaps in relation to potential tuning data for turbot. STECF recommends that the Commission request that fleet /métier data on fishing effort (days at sea and hours fishing) from logbooks and VMS be provided by the respective NAFAs. These data should be aggregated by month. In the short term, any existing data of this type covering the longest possible time period up to 2007 should be made available for the meeting in June 2008. Failure to supply such data will impair the ability of the WG to carry out assessments effectively. For the future, it is important that collection and provision of these data becomes an established routine so that a reliable time series can be built up. STECF requests that the WG propose a system to facilitate the data gathering and collation process.

STECF also requests that during the meeting in June 2008, the WG should review possibilities for future assessments of anchovy and horse mackerel.

6.3. Mediterranean – Evaluation of SGMED-08-01 report

The STECF Sub-group SGMED-08-01 on the Mediterranean met at the premises of DG-Fish in Brussels, Belgium, 10 – 14 March 2008.

Background

The European Community is expected to establish long-term management plans (LTMP) for relevant Mediterranean demersal and small pelagic fisheries based on precautionary approach and adaptive management in taking measures designed to protect and conserve living aquatic resources, to provide for their sustainable exploitation and to minimise the impact of fishing activities on marine eco-systems.

The plans shall include conservation reference points such as targets against which measuring the recovery to or the maintenance of stocks within safe biological limits for fisheries exploiting stocks at/or within safe biological limits (e.g. population size and/or long-term yields and/or fishing mortality rate and/or stability of catches). The management plans shall be drawn up on the basis of the precautionary approach to fisheries management and take account of limit reference points as identified by scientists. The quantitative scientific assessment should provide sufficiently precise and accurate biological and economic indicators and reference points to allow also for an adaptive management of fisheries.

Stating clearly how stocks and fisheries will be assessed and how decision will be taken is fundamental for proper and effective implementation of management plans as well as for transparency and consultations with stakeholders.

Demersal and small pelagic stocks and fisheries in the Mediterranean are evaluated both at national and GFCM level; however these evaluations are often not recurring, are spatially restricted to only some GFCM geographical sub-areas (see attached reference map), covering only partially the overall spatial range where Community fishing fleets and stocks are distributed, and address only few stocks out of several that may be exploited in the same fisheries. Limited attention is also given to technical interactions between different fishing gears exploiting the same stocks.

A limited, although fundamental, scientific contribution of EU fishery scientists to the GFCM assessment process is increasingly affecting the capacity of this regional fisheries management organization to identify harvesting strategies and control rules and to adopt precautionary and adaptive fisheries management measures based on scientific advice.

Anyhow, GFCM and most of the riparian countries consider that management measures to control the exploitation rate and fishing effort, complemented by technical measures, are the most adequate approach for multi-species and multiple-gears Mediterranean fisheries.

Nevertheless, provided that scientific advice underlines to do so, also output measures may be conceivable to manage fisheries particularly for both small pelagic and benthic fish stocks.

Coherence and certain level of harmonization between Community and multilateral framework measures are advisable for effective conservation measures and to enhance responsible management supported by all concerned Parties and stakeholders in the Mediterranean.

STECF can play an important role in focusing greater contributions of European scientists towards stocks and fisheries assessment, in identifying a common scientific framework regarding specific analyses to advise on Community plans and to be then channeled into or completed by the GFCM working groups⁵.

STECF was requested at its November plenary session to set up an operational work-programme for 2008, beginning in the 1st quarter of 2008, with a view to update the status of the main demersal stocks and evaluate the exploitation levels with respect to their biological and economic production potentials and the sustainability of the stock by using both trawl surveys and commercial catch/landing data as collected through the Community Data Collection regulation N° 1543/2000 as well as other scientific information collected at national level.

Within this work-programme STECF is also requested to provide its advice on the status of the main small pelagic stocks and to evaluate the exploitation levels with respect to their biological and economic production potentials and the sustainability of the stock by using both echo and/or DEPM surveys and commercial catch/landing data as collected through the Community Data Collection regulation N° 1543/2000 as well as other scientific information collected at national level.

STECF should take into consideration the data that Member States have been collecting on a regular basis both via monitoring fishing activities and carrying out direct surveys⁶. STECF, in replying at the following terms of reference, should also take into consideration chapter 7 of the 26th STECF Plenary session of 5-9 November 2007⁷, as well as the report of the STECF working group on balance between fishing capacity and fishing opportunities⁸.

STECF shall contribute to identify and setup an advisory framework regarding low risk adaptive management by identifying and using appropriate risk assessment methods in order to understand where we stand with respect to sustainable exploitation of ecologically and economically important stocks and what additional management actions need to be taken.

On the basis of the STECF advice the Commission will launch official data calls to EU Member States requesting submission of data collected under the Community Data Collection regulation N° 1543/2000.

⁵ STECF is requested to take into account the GFCM stock assessment forms as available at the web site <http://www.gfcm.org/fishery/nems/36406/en>

⁶ Council Regulation (EC) No 1343/2007 of 13 November 2007 amending Regulation (EC) No 1543/2000 establishing a Community framework for the collection and management of the data needed to conduct the common fisheries policy
Commission Regulation (EC) No 1581/2004 of 27 August 2004 amending Regulation (EC) No 1639/2001 establishing the minimum and extended Community programmes for the collection of data in the fisheries sector and laying down detailed rules for the application of Council Regulation (EC) No 1543/2000

⁷ <http://stecf.jrc.ec.europa.eu/38>

⁸ Report of the STECF Working Group on The Balance between Capacity and Exploitation SGRST-SGECA-07-05 Working group convened in the margin of SGECA-SGRST-SGECA-07-02 (Review of Scientific advice II), 22-26th Oct 2007. Evaluated and endorsed at the November plenary session.

Terms of reference

STECF is requested in particular:

- to advice whether the data availability may allow the development of a precautionary conceptual framework within which develop specific harvesting strategies and decision control rules for an adaptive management of demersal and small pelagic fisheries in the Mediterranean;
- to set up a conceptual, methodological and operational assessment framework which will allow STECF to carry out in a standardized way both stocks assessment analyses and detailed reviews of assessments done by other scientific bodies in the Mediterranean. The selected assessment methods shall allow estimating indicators for measuring the current status of demersal and small pelagic fisheries and stocks, the sustainability of the exploitation and to measure progress towards higher fishing productivity (MSY or other proxy) with respect to precautionary technical/biological reference points relating to MSY or other yield-based reference points, to low risk of stock collapse and to maintaining the reproductive capacity of the stocks;
- to set up a conceptual, methodological and operational assessment framework which will allow STECF to identify economic indicators and reference points compatible with economic profitability of the main fisheries while ensuring sustainable exploitation of the stocks in the Mediterranean;
- to indicate whether age/length-based VPA or statistical catch-at –age/length methods are adequate modelling tools to estimate precautionary indicators and reference points measuring the current status and future development of multispecies/multigears Mediterranean fisheries. STECF shall also provide a conceptual and operational framework to use, if advisable, these methods for demersal and small pelagic Mediterranean fisheries;
- to identify adequate empirical modelling approaches that are adequate to estimate precautionary indicators and reference points measuring the current status and future development of multispecies/multigears Mediterranean fisheries. STECF shall also provide a conceptual and operational framework to use, if advisable, these methods for demersal and small pelagic Mediterranean fisheries;
- to identify the decision-making support modelling tools that are adequate for the Mediterranean fisheries and that will produce outputs that support sustainable use of fishery resources recognizing the need for a precautionary framework in the face of uncertainty and that may allow to provide projections of alternative scenarios for short-medium and long term management guidance;
- to provide either a qualitative or quantitative understanding of the level of precision and accuracy attached to the estimation of indicators and reference points through the different modelling tools;
- to identify which decision-making support modelling tools may help in setting up stock-size dependent harvesting strategies and respective decision control rules;
- to provide information on the data and standardised format needed for each of the decision-making support modelling tool which will be used to launch official data calls under the DCR

n° 1543/2000. STECF should also indicate criteria to ensure quality cross- checks of the data received upon the calls.

STECF Observations

The SGMED-08-01 realised that it was not the intention to address all ToRs in one meeting and it was understood, that the meeting was to be seen as the first of a number of meetings aiming at enhancing the scientific basis for providing advice on Mediterranean fisheries.

Recognising that an important task for the subgroup was to establish a framework for conducting stock assessments, the subgroup decided to give priority to the following:

- compiling information on availability of fisheries and stock data collected under the data collection regulation,
- evaluating the consistency between available data and data required to conduct the assessments,
- and reviewing available stock assessments and the methods used.

The SGMED-08-01 concluded that the DCR both in terms of biological and economic data has the potential to deliver the data required in support of the assessment and advisory work for most of the priority species.

The Subgroup furthermore identified available stock assessments of priority species conducted since 2002 and presented to the GFCM. The assessments methods and modelling approaches used in these assessments were discussed and commented upon.

The sub-group concluded that a large number of assessments have been conducted applying a wide range of assessments methods. Most of these assessments have, however, not been reviewed and SGMED-08-01 could not within the time available, evaluate the quality of the assessments.

On the basis of the compiled information the subgroup made recommendations on fishing effort and landings data to be provided in advance of the next meeting of SGMED, to allow the sub-group to continue the work on stock assessments and to initiate trial assessments for a number of priority species.

The subgroup recommended the following topics to be included in the ToR for the next meeting.

- Definition of the standardized official data call through DCR.
- Provision and evaluation of effort and landings data for 2006 as described in the report of SGMED-08-03 to be provided by the experts of SGMED-08-02.
- Any indicator assessments for estimation of fishery impacts (probably requires a special subgroup) should be made available by the experts of SGMED-08-02 in the standard format of TA, TB and TC files as defined for the Medits – survey.

- Exploration and provision of data availability to enable and, if possible to initiate trial assessment of European hake, red mullet, anchovy and sardine during SGMED-08-03 and SGMED-08-04.
- Continue of review of existing fish stock assessments of Red shrimps, Norway lobster, red mullet, European hake, sardine, anchovy and deep-sea pink shrimp in order to identify appropriate stocks and methods.
- Initiate assessments of demersal assemblages.
- Compilation and review of social-economic indicators previously obtained for the Mediterranean Sea

STECF Comments and Conclusions

STECF considers that the SGMED-08-01 made good progress in developing a framework for conducting regular assessments of Mediterranean fish and shellfish stocks. The sub-group has compiled a large amount of information on Mediterranean fisheries and the state of the art of stock assessment and thereby established a good platform for forthcoming meetings.

STECF agrees with the recommendation of SGMED-08-01 on how to proceed with the work initiated by the sub-group. As highlighted by the sub-group, it is important that the four meetings planned for 2008 are seen as a continuous process and STECF requests, the SGMED-08-02 to take the report of the SGMED-08-01 as a starting point for its work.

The SGMED-08-01 concluded that the DCR both in terms of biological and economic data has the potential to deliver the data required in support of the assessment and advisory work for most of the priority species. Noting the large number of derogations for species sampling for the Mediterranean in 2008, STECF advises that it is important to ensure that the provisions of the DCR deliver the required information for 2008 for the species to be assessed.

6.4. Mediterranean – Management plans

Background

According to Council Regulation (EC) No 1967/2006 (art.19), Member States are expected to adopt management plans for fisheries conducted by trawl nets (demersal and pelagic), boats seines, shore seines, surrounding nets and dredges (for molluscs) within their territorial waters. So far, some draft plans have been notified to the Commission for it to present its observation before the plan is adopted by Member States and a first set was examined at the STECF November 2007 Plenary.

STECF remarks that according to art.19 point 5 Council Regulation (EC) No 1967/2006 and art. 6 of the Council Regulation (EC) No 2371/2002, the plans shall include conservation reference points such as targets against which the recovery to or the maintenance of stocks within safe biological limits for fisheries exploiting stocks at/or within safe biological limits (e.g. population size and/or long-term yields and/or fishing mortality rate and/or stability of catches). The management plans shall be drawn up on the basis of the precautionary approach

to fisheries management and take account of limit reference points recommended by relevant scientific bodies.

The plans shall ensure the sustainable exploitation of stocks and that impact of fishing activities on marine eco-systems is kept at sustainable levels and may incorporate any measure as more specified in detail in the previous Plenary Report.

Terms of reference

STECF is requested to review the last plan so far received, to evaluate its findings, to make appropriate comments, also with respect to the elements/measures included in the management plan and to advise whether the plan contains elements that account for the state of the exploited resources, if concerned fisheries are expected to exploit main target stocks in line with their production potentials and if the plan is expected to maintain or to revert fisheries productivity to higher levels and in which time frame.

STECF Observations

Article 19 of Council Regulation (EC) No 1967/2006 indicates that Member States should notify their Management Plans to the Commission by September 2007. The draft management plan for Cyprus was received by STECF for evaluation by STECF only just before the Spring Plenary 2008.

STECF notes that the Cyprus Management Plan presents a variety of useful information and scientific data, which could be used in support of the development of a Management Plan for Cyprus. It also contains a general description of the fishery and fleets in Cyprus, a very short summary of the most relevant regulations and a good description of the most relevant species targeted by the bottom trawl fishery.

The description of the fleets shows that in addition to the bottom trawl fishery, there are other Cypriot fisheries (surrounding nets) which are also listed in Article 19 of Council Regulation (EC) No 1967/2006, and for which a Management Plan is required. The Cyprus proposal does not include any management plan for its surrounding net fisheries.

References to existing National legislation relating to bottom trawling are incomplete, although a summary of the major measures are included in the proposal. While this is informative, the precise details of the legislation and the rationale is required by the STECF in order to properly evaluate any management plan.

The draft Management Plan is supported by a summary of scientific information relating to the five target stocks. According to these data, three stocks are currently overexploited (*Mullus barbatus*, *Mullus surmuletus* and *Boops boops*), one (*Pagellus erythrinus*) shows recruitment overfishing and one (*Spicara smaris*) is fished below the MSY.

STECF notes that the Management Plan makes reference to an Operational Programme for Fisheries 2007-2013, which includes a proposal to reduce further the Cypriot bottom trawl fleet. Information about this specific point of the Operational Programme was informally provided by the Commission during the meeting. According to this information, the four remaining trawlers will be dismissed within the timeframe of the Programme. Details of the proposal were not made available to STECF and hence it was not possible to assess the proposed reduction against any management objective.

Due to the lack of detailed scientific data and analysis of stock assessment results referenced in the Management Plan, STECF is not in a position to assess the likely impact on the target stocks included in the plan, because these stocks are also reported to be the target of other fisheries (i.e.: the inshore small fleet), which are responsible of 53.8% of the total catch in Cyprus.

A derogation to permit bottom trawling for a minimum distance from the coast (ranging between 0.7 and 1.5 miles depending on area) is requested within the Management Plan. This is to take in to account the limited coastal shelf and the deep slope existing around most of the coast of Cyprus. STECF believe that this derogation is reasonable, provided the conditions of the legislation are fulfilled (e.g. no trawling in depths less than 50 m depth).

STECF notes that the Management Plan does not include conservation reference points, the objectives of the Plan are not defined and, as a result, the expected time-scale to reach the objectives, as stated in Article 6 (2), (3) and (4) of the Council Regulation (EC) No. 2371/2002, cannot be foreseen. In addition, no economic impact assessment has been provided in the proposed management plan.

Taking into account the observations above, STECF concludes that the proposed management plan submitted by Cyprus does not fully meet the requirements of Article 6 of the Council Regulation (EC) No 2371/2002.

STECF Recommendations

STECF recommends that the Management Plan for the Bottom Trawl Fishery within the Territorial Waters in Cyprus be revised taking into account the above comments and then resubmit for evaluation. An additional management plan for the surrounding net fishery should also be prepared and submitted.

6.5. EU Action plan on sharks

Background

As part of its public consultation the Commission requested STECF to provide its opinion on the Community's Consultation on an EU action plan for Sharks (http://ec.europa.eu/fisheries/index_en.htm).

In reviewing the Community's Consultation on an EU Action plan for sharks, the STECF requested comments and observations from the entire STECF membership. Comments received were then collated, edited and then agreed at its plenary meeting in April 2008. The agreed text is presented as follows:

1. A section giving general comments on the Action plan
2. A section listing observations on each of the specific fields of action.
- 3.

Terms of reference

The STECF is requested to give its comments on the EU Action plan on sharks.

STECF General Comments

Fundamental to the understanding of the implications of the proposed EU action plan for sharks is to recognise and be explicit that the proposals are intended to constitute a plan of action for all elasmobranch species and not only sharks. STECF therefore considers that the proposed Action Plan should be renamed a EU Action plan for elasmobranchs.

STECF notes that the communication gives the general impression that all elasmobranch species are equally threatened by fisheries, whereas, it is highly likely that different species or groups of species which are exploited by different fisheries are experiencing different levels of exploitation and show differing levels of resilience to such exploitation. Furthermore, the exploitation rates on different stocks are likely to have changed over time in response to changes in fishing practices and fishing intensity. STECF therefore considers that even with the limited knowledge available on the status and exploitation of many elasmobranch species, it is likely that a uniform plan of action may not be appropriate for all elasmobranch species or groups of species and that specific actions may need to be decided on a case by case basis. For example, the provisions of an action plan for the sustainable exploitation of pelagic sharks may need to be different to an action plan for skates and rays.

The assertion (Page 3, paragraph 2, line 6) “To the south, in ICES Sub-areas VIII and IX, Spanish and Portuguese longline fisheries are directed at a number of deep-water shark species” is not strictly correct. Since the late 1980s, there has been no directed Portuguese fishery targeting deep-water sharks. Furthermore, the Spanish longline fishery that formerly took place during a period of about three months each year ended with the implementation of Council Regulation (EC) 2015/2006 of 19/12/2006.

STECF notes that there is no reference to the precautionary principle or whether the proposed action plan takes the precautionary principle into account. Furthermore, there is no indication as to how the precautionary approach can be used to decide on actions needed for protection of elasmobranchs. The Consultation document refers to actions to be taken when the regional management bodies have undertaken “reliable assessment” (Section 1.3.1. paragraph 4). In addition, paragraph 9 of section 1.3.1, of the consultation states “In the absence of clear recommendations and advice on shark management stemming from RFMOs, the present European Community’s action will be mainly oriented to improve the knowledge on directed fisheries as well as on incidental catches of sharks”. STECF considers that given the uncertainty in the current assessments and predictions for elasmobranch species and the large gaps in knowledge on exploitation rates and stock status, precautionary measures for the protection of elasmobranch species should be initiated at the same time as the development of the programme to improve understanding of their biology, ecology and exploitation. If we delay in taking protective measures until we have reliable assessments, it may be too late for some species. It can also be argued that not to take action now is counter to the Communication’s statement “the Community should assume a leading role in the development of policies aiming at the rational exploitation of fishing resources.”

STECF notes that the proposed Community action plan is based on the following three main broad objectives:

1. Deepening the knowledge both on shark fisheries and on shark species and their role in the ecosystem.
2. Ensure that directed fisheries for shark are sustainable and that their by-catches are properly regulated.

3. Ensure a coherent approach between the internal and external EC fishery policy for sharks.

While STECF agrees that the broad objectives are appropriate as a basis for developing an action plan, STECF recognises that there is a need to determine for those species that have a commercial value, an appropriate a long-term sustainable exploitation rate and whether such a rate is achievable in practice. In keeping with the ICES advice on elasmobranchs, and in keeping with the precautionary approach, STECF considers that for species where information on trends in exploitation rate and stock status is poor or uncertain and the long-term sustainable exploitation rate is unknown, management action should be taken to reduce exploitation rates to a sufficiently low level and for a sufficiently long period of time in order to assess a sustainable exploitation rate.

In all of the fields of action, STECF considers that in order to give advice on sustainable exploitation rates for elasmobranch resources, it is crucial that data and information that would allow reliable assessments of present and historical exploitation rates, stock status and species-specific life history parameters be examined. In addition, data collection programmes designed to collect data on elasmobranchs should be maintained and extended to ensure that the required data become available.

While the Communication gives a broad overview of the fisheries that exploit elasmobranchs, there is no explicit reference to why the assessment and management of elasmobranchs is so problematic or why the fishery data are so poor or why the biology of many species is so poorly understood. Apart from the fact that traditional assessment methods may be inappropriate for many elasmobranch species, one of the major difficulties with their assessment, is that the catch data are so uncertain. This is primarily due to the recording of landings in generic categories such as 'Skates & Rays', 'Sharks', 'Dogfish', etc. It is very difficult, even given expert knowledge of the fisheries to disaggregate these into species-specific landings. So, even trends in landings are likely to be unavailable for some species/areas. In addition to reliable information on species-specific catches, there is a need to improve the knowledge of the biology of many elasmobranch species and their life history parameters.

STECF Comments on the 9 fields of action

Field of action No 1: Facilitate improved species-specific catch and landings data and monitoring of shark catches.

Field of action No 1 proposes that the EC and RFMOs improve the data collection for shark catches (landings and discards) and trade data. STECF agrees that such action is appropriate and progress in this area has been made in recent years.

However, STECF notes that there is a clear need for collation and examination of historical fisheries data especially on species composition of catches, realised catches and effort. The ICCAT shark species group made a specific reference to the urgent need for data mining⁹.

⁹ ICCAT recommendations:

The Group welcomed the information presented to the meeting on historical catch and effort history of blue and mako sharks. Considering the great importance of this kind of data to the upcoming stock assessment, the Group recommended that Parties conduct data mining research to estimate historical catches (including discarded catch) and catch per unit of effort from the full range of fleets impacting shark

STECF suggests that an important first step towards deepening the knowledge on elasmobranchs and fisheries exploiting elasmobranchs is to verify what information is already available. To do so investment needs to be made to encourage the collation of existing data, and transfer of those data and analyses to the appropriate management bodies. STECF also agrees that improvement in the recording of by-catch of elasmobranchs in fisheries directed to other species should also be a priority at the Community level. Such improvement could be aided through additional funding of the DCR to improve the collection of elasmobranch data at landing sites and throughout the processing chain. STECF also suggests that the collation of existing data and enhancement of the current data collection programme should not be restricted to collection of catch data but should include collection of biological information required for stock assessment.

Field of Action No 2: Facilitate the identification and reporting of species-specific biological and trade data.

The proposed option at the Community level for full observer cover for vessels over 24m and with by-catch figures more than 10% - 15% etc., may encourage future misreporting of by-catch by vessels that are not obliged to carry observers.

STECF also suggests that it should be mandatory for all vessels wishing to land shark fins without the accompanying carcass, to carry observers on board. This comment applies to both measures taken at the Community level as well as the RMOs level.

Regarding possible option 1: “At an initial phase, mandate full coverage on fishing vessels by independent on-board observers for vessels over 24 m and with recent by-catches figures of more than 10% to 15% (depending on the particular fishery) of sharks over the total catch.” In order to provide informed comment, STECF would appreciate some clarification on the reasons for the selection of these vessel and by-catch parameters. It is difficult to see why a census of this particular category has been singled out and it is unclear what this will contribute to the conservation of shark populations. STECF notes that the increased requirement for observers is potentially expensive and, based on experiences from other observer schemes, logistically difficult. One possibility may be cost recovery from the industry. Since the resourcing problem is a generic one, however, it would be more appropriate to undertake an exploration of options in the context of observer programmes generally and drawing on experience of funding models in other parts of the world.

STECF notes that while the proposed observer coverage is desirable and ambitious and will no doubt be expensive to implement. Furthermore, Council Regulation (EC) 41/2007, already specifies observer coverage of 20% of the EU surface longline fleet over 15 m in length. Such vessels are responsible for the majority of the EU by-catch of pelagic sharks so proper enforcement of the provisions of Regulation 41/2007 should provide adequate observer coverage for surface longline fleets.

species. This is particularly important for those fleets which have a long, and thus useful, history of catch rates but have only recently begun reporting shark catches by species;

The Group emphasized that the stock assessments of blue and mako shark stocks scheduled for 2008 will be severely hampered, or even impeded, if CPUE series from the main fisheries catching those species be not made available. In this regard, it is particularly critical that standardized CPUE series from those which have not yet been submitted be provided prior to the meeting. The group also emphasized the need for participation by scientists with knowledge of these fisheries in the assessment

Field of action 3: Compile the necessary information to assess threats to shark populations, determine and protect critical habitats, and implement harvesting strategies consistent with the principles of biological sustainability and rational long term economic use.

STECF has no comments

Field of Action No 4: Develop research projects to assess threats to shark populations and implement harvesting strategies consistent with the principles of biological sustainability and rational long term economic use.

STECF suggests that the Community level proposal “Study biology and ecology of sharks” should be reworded to reflect the true focus which is to target gaps in knowledge which are important for assessing threats in the elasmobranch populations. STECF suggests that the following is an appropriate replacement.

“ Identify gaps in the current knowledge of biology and ecology that should be filled in order to support assessment of threats and advice on sustainable management of elasmobranch fisheries. Undertake studies to fill any such gaps”.

Field of action No 5: Improve and develop frameworks for establishing and coordinating effective consultation involving stakeholders in research, management and educational initiatives within and between States.

STECF has no comments

Field of action No 6: Adjust fishing effort to the available resources.

STECF has no comments.

Field of action No 7: Adjust catches to the available resources.

Regarding possible option 2: “Prohibit all shark discards and require that all catches (including by-catches) are landed. Unwanted by-catches of sharks that have a chance to survive must be released back into the water”.

STECF suggests that option 2 may lead to unpredictable behaviour within the fisheries that catch elasmobranchs. Furthermore, a discard ban is essentially unenforceable without observer coverage, may lead to increased mortality for some species and may not achieve the objective of improving catch statistics.

Field of Action No 8: Minimize waste and discards from shark catches in accordance with article 7.2.2(g) of the Code of Conduct for Responsible Fisheries requiring the retention of sharks from which fins are removed and encourage the use of dead sharks.

STECF notes that this field of action primarily addresses the issue of finning and the appropriate fin weight-dressed weight (or live weight) ratio.

With regard to finning, STECF notes that two main practices take place.

1. Cases where the fins are removed from the fish and the carcase is discarded back into the sea.
2. Cases where the fins are removed, the carcase is dressed and the fins and carcase are sold to separate markets.

Regarding case 1, STECF believes is not the normal practice for EU fisheries exploiting elasmobranchs except for skates and rays in some demersal fisheries and a limited number of long-line fisheries in the outer regions. For this case, STECF agrees that this practice should not take place since it leads to an increase in mortality on elasmobranch species, primarily pelagic sharks, which in many instances could be released back into the sea alive. Furthermore, without appropriate species-specific fin-weight to live weight conversion factors, this practice can lead to a distortion of the catch statistics required for stock assessment purposes. STECF therefore recommends that measures should be put in place to eradicate such practices without exemption. STECF suggests that this should apply to all elasmobranch species including skates and rays, which should be landed whole or gutted, fins on.

In case 2, both the fins and the carcase are retained and marketed. In such cases, the practice of finning is simply a catch processing issue, which should not lead to additional mortality of species that could be discarded alive. However, because the fins and carcase are marketed separately, for compliance purposes and to ensure accurate catch statistics, it is essential that appropriate fin-weight/carcase weight ratios be used. STECF therefore supports possible options 2 and agrees that the 5% ratio currently proposed be reviewed. In addition, STECF also supports possible option 3, the proposal to oblige vessels to land carcasses and fins in the same port in order to improve the quality of landing statistics.

Field of action No 9: Identify and provide special attention in particular to vulnerable or threatened shark stocks.

STECF notes that possible option 1 of the proposal is to establish by-catch reduction programmes for elasmobranch species considered Critically Endangered or Endangered by IUCN, where a zero TAC or prohibited status is not in force for these species.

STECF agrees that the proposed bycatch reduction programmes are desirable but should be applied regardless of whether a TAC has been set.

STECF notes that as part of the Consultation on the EU action plan for sharks, the IUCN has requested that the Commission consider providing definitions for each of the IUCN Red List threatened categories and provide details of the criteria that have to be met before each of these threatened categories are assigned. STECF agrees with the IUCN request and recommends that an expedient way forward would be to convene a meeting under the auspices of the STECF to undertake this task.

STECF recommendations on developing a plan of action for elasmobranchs:

1. In terms of the main issues for developing an EC-IPOA for elasmobranchs, STECF considers that the following are the 5 most important action are as follow:

i) The first main action for an IPOA-Elasmobranchs, which is not specifically identified in the EC proposal (though cuts across actions 1, 2 and 5), is species identification and is fundamental to all subsequent actions. Production of a user-friendly identification guide of NE Atlantic and Mediterranean elasmobranchs for market samplers and buyers and laminated guides (for particular species complexes, such as Mediterranean skates and rays; NE Atlantic skates and rays; deep-water sharks; shelf-living sharks and dogfishes; pelagic sharks) for fishermen are required to enable accurate species-specific recording of catches. Such guides should also provide standardised common names in the various European languages that relate to valid scientific names. It must also be recognised that the taxonomy of certain taxa, such as skates and deep-water sharks, is still not definitive, and further taxonomic studies are required (see iii), although this should not preclude the production of identification material in the short term. STECF notes that in the framework of an European project on rays in the Northern Mediterranean Sea (FISH/2004), a field identification guide for rays has been produced. The guide includes drawings and a photo gallery including some anatomical detail and egg cases. A new identification guide to the sharks and rays of the Mediterranean and Black Sea was also produced in 2005 (FAO Species Identification Guide for Fishery Purposes. Rome, FAO. 2005. 97pp.) and the production of a simple field identification guide is currently in progress.

ii) The increased use of species-specific recording of all elasmobranchs, with a corresponding decrease in quantities reported under generic codes, should be one of the important objectives of an IPOA (i.e. Field of Action 2). Prior to this, correct and user-friendly identification aids are required (see above).

iii) Promotion of coordinated biological and ecological studies, including fishery-independent surveys; taxonomic studies for problematic taxa; reproductive biology; age and growth; stock identity; movements and migrations; habitat use (including the identification of breeding grounds of commercial species and areas of local importance to vulnerable species). These data are needed for either stock assessment and/or informing on appropriate management measures, and could usefully include collaborative studies with industry. This equates with Fields of Action 3 and 4.

iv) Development of stock assessment methods for elasmobranch species, undertake status reviews and examination of the efficacy of potential management measures for fisheries exploiting elasmobranchs (Field of Action 3).

v) Protection of rarest elasmobranchs through the use of appropriate management instruments.

7. FISHING GEAR TECHNOLOGY

7.1. Characteristics of trawl fishing gear in the Mediterranean: maximum dimension of trawl nets and relationship with maximum engine power of individual vessels

Background

The Community has an obligation to establish the maximum dimension of trawl nets in the Mediterranean. A regional workshop was convened in autumn 2007 which were attended by fishermen representatives, net-makers and gear technologists. Unfortunately no Spanish fishing gear technologists were able to attend this workshop. The main problem is that the maximum dimension received from French, Italian and Greek net-makers and scientists are coherent among themselves but much smaller than those proposed as common standard by the Spanish net-makers.

Terms of reference

1) STECF is requested to advice on the breaking point of single twine netting materials having a twine thickness of 3 mm and of 6 mm.

STECF Observations

The strength of a section of netting or cod-end in relation to its ability to take a catch load depends on the characteristics of the netting material used, the twine thickness and the number of meshes around. Based on this input, the strength of the net to take a catch load can be calculated but this should be considered as a theoretical maximum to take a static load. Dynamic conditions and damage to the netting during the fishing and hauling operation may result in a decrease of the maximum load a section of netting can take. Furthermore, during fishing, the strength of netting can decrease due to deterioration of the material due to wear and tear, exposure to sunlight and abrasion of the knots. In certain conditions strengthening bags are used to protect the cod-end. The calculations below only refer to the theoretical maximum of one sheet of netting made of single braided twine.

The basic netting material characteristics are given in Table 1, i.e. twine and knot breaking strengths of different netting materials used in commercial fisheries. This is based on the characteristics of 40 commercially available products in the EU.

Since the weakest element of a net mesh is the knot, the twine breaking strength should not be used to for the calculations, but only the knot breaking strength, which is experimentally determined in a dedicated experimental set-up.

Table 1: Twine and knot breaking strength of different netting materials used in commercial fisheries

Material	Twine diameter (mm)			
	3	6	3	6
	Twine breaking strength (kgf)		Knot breaking strength (kgf)	
<i>Dyneema SK65</i>	840	2440	1092 ⁽¹⁾	3172 ⁽¹⁾
<i>Polyamide</i>	228	709	296 ⁽¹⁾	922 ⁽¹⁾
<i>Polyamide – high performance</i>	402	---	400	---
<i>Polyethylene</i>	127	399	181	574
<i>Polyethylene – high density</i>	140	425	181	580
<i>Polyethylene – high performance</i>	191	732	245	952 ⁽¹⁾
<i>Polyester</i>	297	813	386 ⁽¹⁾	1057 ⁽¹⁾
<i>Polypropylene – high performance</i>	147	---	191 ⁽¹⁾	---
⁽¹⁾ : estimated				

Note 1: 1 kgf = 1 kg-force = 9.8 N

Note 2: In this document, the dimension of the twine is given as the diameter in mm. Runnage (mts/kg), however, is a more objective way to specify twine size. Twine diameters can be misleading as some manufacturers define diameters for a given runnage differently to others. This can easily cause confusion and so users must be careful when comparing the strengths of different manufacturers materials.

Note 3: Manufacturers have improved the characteristics of netting materials to give it high resistance to abrasion, to increase the strength and to increase the compactness in order to minimize the penetration of sediment leading to a more stable mesh size. The “high density” label refers to compact material and the “high performance” label refers to compact material made of high tenacity monofilaments and special twine construction.

The theoretical maximum weight a section of netting can take is calculated as the product of the knot breaking strength with the number of meshes around (Table 2). As a basis for calculation, a section has been selected of 100 meshes around.

Table 2: The theoretical maximum breaking strength of a section of netting of 100 meshes

<i>Material</i>	<i>Twine diameter (mm)</i>	
	3	6
	Breaking strength (tf) ⁽²⁾	
<i>Dyneema SK65</i>	109	317
<i>Polyamide</i>	30	92
<i>Polyamide – high performance</i>	40	---
<i>Polyethylene</i>	18	57
<i>Polyethylene – high density</i>	18	58
<i>Polyethylene – high performance</i>	25	95
<i>Polyester</i>	39	106
<i>Polypropylene – high performance</i>	19	---
⁽²⁾ : 1 tf = 1 ton-force = 1000 kgf = 9800 N		

STECF note that, provided cod-ends are well maintained and provided the fishery is not conducted in extreme conditions, the strength of a standard cod-end of pelagic and demersal trawls is well within the strength needed to take the load of the catches common in the Mediterranean.

Terms of Reference

2) STECF is requested to advice on whether there are any relationships between the engine power and the dimensions of floatline, groundrope, circumference or perimeter of trawl nets.

STECF Observations

A theoretical relationship can be established between the size of a net and the power needed to tow the net at a certain speed. This is, however, subject to a number of assumptions. In order to illustrate the impracticality of this theoretical approach, the basic ideas are presented below.

The power P to overcome the drag D of a trawl and tow it at speed U is

$$P = DU.$$

The drag is related to speed and a trawl net surface area A such that

$$D \sim A U^2$$

where A usually is the surface area of twine used (ie the total length of twine multiplied by twine thickness). Therefore:

$$P \sim A U^3$$

P is thus proportional to A, and A is proportional to the square of the spatial

scale (L). If the size of the trawl is doubled, the surface area increases by the square and similarly the power needs to increase by the square as well to overcome drag i.e.

$$P \sim L^2 \text{ (if speed remains constant).}$$

Unfortunately there are many provisos with this approach. First of all it assumes that any alteration of gear will be proportional, i.e. length, breadth etc will change by the same factor. Also it assumes that twine thickness remains the same. The above analysis only deals with the power required to tow the net and does not take account of seafloor friction and other gear elements like otter boards, sweeps etc. It is also necessary to include the power required to propel the vessel through the water. This will be very important and will vary with the conditions at sea (it may be disproportionately important for larger vessels as they may wish to go to sea in more extreme conditions). The efficiency of the engine and propeller must also be factored to account for the loss from rated horse power to power available. Finally, the handling capabilities on board, which are not strictly proportional to the engine power, will determine the maximum size of the gear.

A theoretical approach to determine a relationship between the size of the fishing gear and the engine power of the fishing vessel is thus not realistic. A second option is to use field data to establish a relationship. First, a suitable parameter to describe the size of the trawl has to be selected, i.e. a parameter that can uniformly be used for the wide variety of trawls that exist, keeping in mind that this parameter should give information on the catchability of a trawl. Due to the fundamentally different characteristics, it is best to treat pelagic and demersal trawls separately.

For pelagic trawls, the net opening is the main factor determining the catchability. Two parameters specifying the net opening of the trawl are (1) the “fishing circle” (definition below) and (2) the sum of the lengths of the floatline, footrope and sidelines. It can be assumed that the majority of the fishing vessels will maximize the trawl size in relation to the towing power (viz. bollard pull) and a relationship between power and size can be established when field data are available. Two remarks: (1) due to technological advances in twine material, the dimensions of pelagic trawls have increased for the same drag. Consequently it is required that recent data are used. (2) A certain variability is expected because maximum trawl size will not only depend on the towing power of the vessels but also on target species and operational conditions.

For demersal trawls (otter and pair trawls), the area swept is a determining factor for the catchability. Many trawl parameters determine the swept area and there is probably not one parameter that is suitable to cover the whole range of demersal trawls used. The length of the groundgear (footrope) and/or headline may be the better choice. In order for these parameters to be useful, a clear definition should be selected, one that overcomes problems like e.g. short wing trawls. For otter trawls, the otter board surface may also be a good indicator for trawl size.

Since, however, no dataset was available with recent suitable data of these parameters and the engine powers linked with these data, STECF could not calculate the requested relationship.

Note 1: Fishing circle: “The fishing circle can be defined as a measure of the total circumference of a trawl or seine (Scottish or Danish) at the first row of meshes behind the

centre of the footrope, measured in numbers of meshes. This is often standardized to an equivalent number of 200mm meshes.”

8. DATA COLLECTION FRAMEWORK

8.1. Timing of STECF advice on DCR issues

STECF is requested to review the reports of the SGRN and SGECA meetings that took place in December 2007 (SGRN 07-04), January 2008 (SGECA 08-01) and February 2008 (SGRN-SGECA 08-01).

There is general consensus in STECF that a review of reports related to the Data Collection Framework cannot be delivered by written procedure, given the complex nature of the reports. Thus, the Spring Plenary was the first STECF session where these reports could be reviewed. STECF notes that the Commission prepared and distributed draft regulations relating to DCR and National Programmes based only on working group reports. STECF recommends that the Commission should first take account of STECF advice before it takes action based the contents of working group reports.

8.2. Evaluation of Economic Parameters to be collected under the new DCR

STECF is requested to review the report of the SGECA 08-01 meeting of January 21-25, 2008 (Lisbon), evaluate the findings and make any appropriate comments and recommendations.

Terms of reference

Terms of Reference for the Working Group were as follows:

1. Review the list of proposed economic variables to be collected in the new DCR for the fishing, aquaculture and processing sectors presented in the ad-hoc Commission document 25
2. Propose or update stratification for:
 - regional length vessel classes
 - size category of fishing companies (see table for the fishing sector)
 - size segmentation for the enterprises (< 5 employees, 5-10 employees etc) and the segmentation of product size categories (see table for the aquaculture sector)
 - segmentation of production by species (see table for the processing industry)
4. Propose guidelines on how to estimate capital values and costs (this will based on the recommendation from the study “Evaluation of the Capital value, Investments and Capital costs” 6, the Salerno Meeting 22 and from Member States experiences, to be presented during the meeting).

STECF Conclusions and Recommendations

STECF welcomes the report of SGECA 08-01 and generally endorses its conclusions.

STECF notes the concerns expressed within the working group about the apparent requirement in the forthcoming Commission regulation that all economic variables should continue to be collected for all active vessels (i.e., all vessels in the commercial fleet register which are active for more than zero days in the year). This question, which has both theoretical and practical dimensions, has been discussed in STECF working groups on numerous occasions without resolution.

On this subject, STECF recalls its recommendation of November 2007 that “the Commission encourages MS to co-operate with the JRC study on [survey] thresholds and their implications for data quality. A working group meeting should then consider the results of the study and the implications for the new DCR”. Since it appears that no progress has been achieved on this, STECF strongly endorses SGECA’s suggestion to launch a study to assess the theoretical and practical issues relating to the use of data collection thresholds based upon vessel activity or turnover and to make recommendations for a harmonised approach.

STECF considers that this issue should ideally be resolved prior to adoption of the new Commission regulation. If this is not possible, STECF recommends that interim guidelines should be agreed between the Commission and STECF for the evaluation of MS’ National Programmes and Technical Reports until the regulation and guidelines can, if necessary, be amended in the light of the proposed study.

STECF also agrees with the working group’s recommendations to conduct studies on the valuation of intangible assets (such as quotas and licences), on the implications of collecting data from different sources (e.g., questionnaires, company accounts, statistics, etc.) and on the requirement for “social indicators”.

Regarding the processing industry, STECF notes that some significant practical issues may arise in the collection of data. In Annex II the report states that

“For enterprises that carry out fish processing but not as a main activity it is mandatory to collect the following data, in the first year of each programming period of the Data Collection Regulation, starting in the second programming period of the new DCR:

- number of enterprises
- turnover attributed to fish processing”

To make a census of every business that might potentially be processing fish, in order to establish whether that company should be covered by data collection, will be costly and largely unnecessary. STECF therefore recommends that data should be collected only for those businesses that are classified as fish processing businesses under the existing Eurostat definition.

8.3. Implementation of the fleet based approach

STECF is requested to review the report of the SGECA/SGRN-08-01 meeting of February 4-8, 2008 (Nantes), evaluate the findings and make any appropriate comments and recommendations.

Background

The EC Data Collection Regulation (DCR) has been implemented since 2001 with the aim of harmonising the collection of fisheries biological and economic data across the Member States. Despite the recognised benefits brought about by the DCR, the scientific community and managers acknowledged that the current procedure of collecting biological data on a stock basis and economic data on a fleet based did not favour the provision of relevant inputs to fishery-based management advice. The review of the DCR started in 2005 was an opportunity to integrate the fishery-based approach in the future collection of bio-economic data.

In 2001 and 2002, the European Commission requested ICES to start compiling catch-at-age data disaggregated by fishery that would be more suitable to perform fishery-based forecasts. ICES reacted by establishing in 2003 and 2004 the Study Group for the Development of Fishery-Based Forecasts (SGDFF). The two major tasks of SGDFF were to provide fleet and fishery definitions and advise on a database structure and data exchange format for the mixed-species and multi-fisheries forecasts. Since 2003, WGNSSK (the Working Group for the assessment of fisheries in the North Sea and Skagerrak) has compiled catch-at-age data disaggregated by country and by fishery, using the format defined by SGDFF, and has provided preliminary mixed-fisheries forecasts. The Advisory Committee for Fishery Management (ACFM) however, rejected the use of MTAC for advisory purposes, mostly based on the argument that the data were inadequate. Despite the concerns of ACFM, STECF has calculated mixed-fisheries catch options for the North Sea, North-Western and South-Western areas.

In 2003, the General Fisheries Commission for the Mediterranean (GFCM) defined Operational Units (OU) for the Mediterranean area. Although the OU have been primarily defined for management purposes, they will also be expected to facilitate consistent collection of bio-economic data in the Mediterranean Sea.

On the basis of these experiences, both in the ICES area and in the Mediterranean Sea, ICES PGCCDBS recommended in 2005 that a Workshop be established, under the auspices of the European Commission, to recommend a fleet and fishery segmentation to be used for the future sampling design of bio-economic data.

In this view, a Workshop on Fleet-Fishery Based Sampling was carried out by the Commission in May 2005 to agree on the concepts, the terminology and to define the process to establish the fleet segments. The Workshop proposed a generic approach to split the fishing trips into groups of similar exploitation pattern, clustered in a hierarchical tree. An equivalent multi level approach is applied to the fleets for economic sampling purpose. The economic and biological information can be then gathered harmoniously in a matrix where the fleets segments correspond to the lines and the fishing activities correspond to the columns.

This Workshop was followed by a Workshop on Small-scale fisheries to take into account their specificities (multi-species multi-gear fisheries, heterogeneity, high variability in fishery

activity over the time, lack of information concerning landings, discards and effort). The consequences for defining the sampling protocols to collect information related to this fleet segment were evaluated.

One of the recommendations of the Workshop on Fleet-Fishery based sampling was that Member States tested this matrix approach on their national data in order to check its relevancy and if necessary to propose better adequate and stable national fleet segmentation for the length vessel classes.

The results would have been presented to the Regional Coordination Meetings (RCMs) by September/October 2005, so proposal for fleet segmentations at the regional level could be done and then final decisions for all the areas could be taken during a final Workshop later at the start of 2006.

Only some Member States carried out the require analyses and were able to present results to the RCMs. Most of the Member States pointed out the difficulties in following the recommendations from the May 2005 Workshop. So, the Commission decided to postpone the final Workshop by June 2006 and to plan a specific Workshop in March 2006 in order to train the scientists involved in the Fleet Based Sampling.

During this training Workshop recommendations were made to set the regional matrix, guidelines were given to fill in the matrix and rules were established to carry out analysis in order to guarantee the relevant data will be provided to the June 2006 Workshop and the necessary analysis will be carried out by the participants in their Institutes with their national data in order to prepare the requested data for the June Workshop.

The purpose of this June Workshop was to finalize the Fleet-Based Sampling exercise, and based on the results of the analysis carried out on the national data and the information provided to the Workshop by the participants, to take final decisions about the regional fleet segments. These segments will be used in the new Data Collection Framework as key element for stratification of the regional sampling designs in order to collect information at the regional level.

In order to prepare the implementing regulation of the new Data Collection Framework there is a need to establish common operational rules for the collection of biological and economic data in the fleet-based approach context.

Terms of reference

Terms of Reference of the Working Group were as follows:

- a) Review the fleet-fishing activity matrix at both EU and regional levels
- b) Propose or update stratification for regional length vessel classes
- c) Establish a regional design and regional protocols for the collection of biological and economic data in the view of the fleet based approach and SGRN recommendations (ref. doc #22): the proposal should include suggestions for the sampling strata, the sampling intensities and precision levels wherever possible, and for criteria for allocation of the fishing activity (dominance/exclusivity)

- d) Propose operational guidelines for the implementation of the new data collection framework (both for collection of biological and economic data).

STECF Comments and Observations

STECF reviewed the report of the **SGRN-SGECA 08-01** Working Group on the fleet based approach of the proposed new DCR and notes that, at the request of the Commission, the text of the working group report was initially prepared by the Commission with the intention that it could be amended and used as the text of the draft regulation relating to the DCR. **STECF insists** that the main text of its working group reports should be a report of the proceedings of the group, and that any proposed text to be used in regulations should be included as an appendix.

STECF notes that a draft implementation regulation has already been published for MS consultation based on the report of the working group.

STECF observes that for economic variables, the report suggests that the population to be sampled includes only “active vessels” [3.2.1. point 4.]. Non-active vessels, while they have no activity data, still have a capital value and should not be excluded from sampling. STECF suggests that this be pursued as indicated in Section 8.1 of this plenary report.

STECF agrees that bio-econ modelling is better served if economic and transversal data are linked for individual vessels within MS data sets, but notes that some MS may have problems doing this because of issues of data confidentiality. [3.2.1. point 5.]

STECF notes that for economic data, a sampling strategy is required in order to achieve a required target level of precision for each segment [section 4. ref. 3.2.3]. STECF suggests that the variation present in the previous year’s data should be used to determine required sample sizes per segment. The sampling strategy will therefore need to be reviewed annually.

STECF suggests that MS should include in their annual report the basis on which vessels were allocated to one supra-region for vessels that fished in more than one supra-region. [section 3.2.2 Point 3]

Regarding the grouping of two segments together for economic data collecting and reporting when there are less than 10 vessels in a segment, STECF observes that the statistical justification required relates to the choice of other segment into which the vessels are grouped. [section 3.2.2 Point 4, 2nd bullet]

In section 3.2.2 paragraph 4. of the working group report, there is an apparent contradiction regarding MS’ right to make their own decisions on grouping of vessels from two segments into one segment, when there are fewer than 10 vessels in a segment. The report first states that MS can choose their grouping of segments for collecting and reporting of economic data, then states that the RCMs should agree segment-clustering (grouping) rules for supra-regions. **STECF suggests** that the text under 3.2.2 paragraph 4. of the report should not be included in the final regulation. **STECF proposes** that the new regulation should be clear on whether MS can choose their grouping of segments for collecting and reporting of economic data or whether they are legally obliged to follow the advice of the RCMs. **STECF notes** that careful consideration should be given to any potential timing issues between dates of RCMs, planning

of sampling strategies and dates for submission of MS technical reports (see also Section 9.2 of this plenary report).

STECF notes that in the report section headed “Sampling implementation programme” [section 3.3.1.3, para 1.] it is not clear what “article” is referred to.

STECF agrees with the group that, in due course, there should be further examination of the appropriate allocation of economic variables between supra-regions in the case where vessels fish in more than one supra-region. [section 4. ref. 3.2.2 point 2]

With regard to the need to implement biological sampling programmes of landings [section 3.3.1.1 point 4.], it would be helpful to clarify whether paragraph b) refers only to cases where there is habitual grouping together of similar species for landings records. **STECF suggests** that this clarification be incorporated into the new regulation.

For guidance on disaggregation levels [section 3.3.1.2], the report says that Supra regional agreement on grouping of fleet segments will be important. **STECF also proposes** that the RCM should, wherever possible, seek consistency in the clustering between the biological and economic variables. Any inconsistencies of clustering between the economic and biological variables, should be noted and explained.

STECF suggests that MS should adopt a common understanding of the meaning of “trip” for the biological sampling unit purposes. [section 3.3.1.3]

STECF suggests that the new regulation includes a reiteration of the “precision and accuracy objectives” with regard to biological data sampling. [section 3.3.2.4]

With regard to precision levels in population-related variables [section 3.3.2.4], STECF notes that MSs will need further clarification on the second paragraph of section 3.3.2.4 of the report. The text as it stands does not give enough information to the national programmes to tell them what they actually need to do with regard to estimating age in stocks for which age reading is not possible.

STECF suggests that the term “transversal” be included in the glossary of terms.

Regarding transversal variables [section 3.4.1. 2nd para], STECF notes that it may be necessary that a vessel allocated to a segment based on the previous year’s activity, may need to be allocated to a different segment when the effort data becomes available, e.g. because it may have used different gear in the year in question.

There is an implied heavy work load for economists and biologists in designing and implementing this new sampling and analysis programme. **STECF proposes** that the Commission should urge MS to ensure that they have made sufficient preparation to achieve the submission deadlines.

STECF Conclusions and Recommendations

Module for the collection of economic variables

In line with the working group conclusion, **STECF reiterates its previous recommendation** that the issues and questions relating to fleet segment / metier level economic data should be addressed either by a study or by a SGECA working group. [section 3.2.2 Point 1]

Module for the collection of biological variables

With regard to the length structure of the catches, it is necessary to have a definition of “negligible discards”. **STECF recommends** that a definition for negligible discards is incorporated into the new regulation.

Regarding weight of discards for selected species and occurrence and weight of non-commercial species in the catches [section 3.3.1.1 point 1], STECF notes that there is no text against these headings in the report and that it would be required to know what is intended with regard to data collection in these cases. **STECF recommends** the new regulation includes clear guidance on the requirements for weight of discards for selected species and occurrence and weight of non-commercial species in the catches.

STECF notes that limited reference is made by the WG to the concept of concurrent sampling. The principle of this was first outlined by SGRN in its 2006 report (SGRN-06-03 - Brussels, 27 Nov - 1 Dec 2006) as follows :

“In order to be able to fully appreciate and model the interactions between the different species taken by a métier, it is also essential to organise sampling in such a way that all species are sampled concurrently, actually meaning that all sampling for catch and length composition data is done simultaneously on all species in a vessel's catches or landing

In order that the new regulation is fully informative, **STECF recommends** that the following text be incorporated in the final regulation: “the definition of “concurrent sampling” is: sampling all or a predefined assemblage of species, simultaneously in a vessel's catches or landings.

STECF notes that the working group attempted to provide guidance on how the concept of concurrent sampling might be implemented in practise by including a schematic. Table XX [section 3.3.1.3] purports to show 3 ways in which concurrent sampling could be achieved. STECF is of the opinion that the table and explanatory text do not help and may lead to confusion. Furthermore, the Table legend suggests that the Table includes guidance on additional sampling for the purpose of achieving precision targets. STECF considers that this is not at all clear and therefore **recommends** that the members of SGRN who are closely involved in the development of the ideas on which implementation of concurrent sampling is based, should provide a clear explanation of the process with more transparent examples provided and that the explanation and examples are included in the final regulation before it is adopted. STECF also considers it unfortunate that the existing explanation and Table has been incorporated into the draft regulation before this problem was highlighted.

With regard to the list of species for biological sampling, given in Appendix 4 of the report, STECF notes that the working group was unable to finalise this list during the meeting and suggested that the list would need to be revised by the relevant RCMs. Due to incompleteness and inter-species discrepancies, the species list is not currently suitable to be used as a firm requirement under a regulation. STECF notes however, that the draft legislation distributed to MS contains the list in its incomplete state. **STECF recommends** that revisions to and completion of the species list in Appendix 4 should be completed before being adopted into legislation. **STECF concludes** that it should take responsibility for the required revision process and the STECF Board undertakes to establish (in consultation with the EU Commission) a mechanism for ensuring that stocks are allocated to appropriate groups (G1, G2 and G3).

STECF also draws attention to the sample sizes included in Appendix 4 and **recommends** that the values proposed be used only when information from the previous DCR is insufficient to estimate sample size in accordance with pre-settled precision levels (error and significance level).

Module for the collection of transversal variables

With regard to the sampling strategy for transversal variables [section 3.4.2], the wording in the working group report is not clear. Since this wording has been included in the draft regulation, **STECF recommends** that the point should be clarified before the regulation is finalised and agreed.

8.4. Evaluation of Data Collection programmes

Terms of reference

STECF is requested to review the report of the SGRN-07-04 meeting of December 3-6, 2007 (Gazzada, Italy), evaluate the findings and make any appropriate comments and recommendations.

Terms of Reference of the Working Group were as follows:

- Evaluate the derogations and non-conformities compared with the DCR requirements in the member states National Programmes for 2008 . This evaluation should take into account also the non-conformities in terms of oversampling and/or undersampling.
- Analysis of the outline National Programmes 2008 for Bulgaria and Romania
- Stock taking of the submission of due pilot studies. Analysis of the Cyprus discards pilot study.
- Evaluation of the situation regarding the response by MS to the call for economic data launched in 2006 and 2007
- AOB (Studies, Situation of the new DCR, New ICES Advisory System..)
- Evaluate the derogations and non-conformities compared with the DCR requirements in the member states National Programmes for 2008 . This evaluation should take into account also the non-conformities in terms of oversampling and/or undersampling.
- Analysis of the outline National Programmes 2008 for Bulgaria and Romania
- Stock taking of the submission of due pilot studies. Analysis of the Cyprus discards pilot study.
- Evaluation of the situation regarding the response by MS to the call for economic data launched in 2006 and 2007
- AOB (Studies, Situation of the new DCR, New ICES Advisory System.)

STECF Comments and Conclusions

STECF identified two issues that require immediate action by the Commission

- a) the timing of the SGRN evaluation of the MS National Programmes and of the STECF review of the SGRN report
- b) the transparency of derogations requested by MS, their SGRN evaluation and follow-up procedures

Within the DCR Framework Regulation, STECF is explicitly asked to advise the Commission on the national programmes:

Reg. 1543/2000, Article 8, paragraph 2: “Without prejudice to paragraph 1, the programmes referred to in Article 5 shall be adopted after the STECF and the ACF have been consulted.”

Reg. 199/2008, Article 6, paragraph 1: “The Scientific, Technical and Economic Committee for Fisheries (STECF) shall evaluate: (a) the conformity of the national programmes and any amendments thereto with Articles 4 and 5; and (b) the scientific relevance of the data to be covered by national programmes for the purposes laid down in Article 1(1) and the quality of the proposed methods and procedures.

As the SGRN evaluation of the 2008 National Programmes was taking place in December 2007 (SGRN 07-04, Gazzada, 3-7 Dec 2007), the Spring Plenary was the first STECF session where the SGRN report could be reviewed. The bilateral (between COM and MS) approval procedure of the NP 2008, however, was already in its final stages when STECF met. This timing problem limits the value of STECF recommendations on the 2008 NPs. There is general consensus in STECF that a review of reports related to the Data Collection Framework cannot be delivered by written procedure, given the complex nature of the reports.

The NPs 2009-2010 will have to be submitted by 30 Sep 2008 according to the draft Implementation Regulation and Decision (COM 2008a,b). In order to ensure an STECF review of the SGRN report in due time before the approval procedure on NPs starts, STECF plans to have the SGRN meeting 08-03 in late October 2008 (deviating from the current dates of 1-5 Dec 2008). This would allow STECF to review the SGRN outcome in its Winter plenary in November. The situation for the review of the NPs 2011-2013 will be more relaxed, as their submission deadline is suggested for 31 March 2010.

STECF noted that some MS had requested derogations in their NPs to refrain from the collection of biological data for several mandatory species in the frame of the DCR or obligations set by an international or regional fishery commission. These derogations were only partly commented on by SGRN. STECF notes that the reasons for derogation requests were not given in several cases and that MSs concerned were not requested to justify their derogations. In general, STECF considers that derogations to mandatory requirements should not be acceptable, unless they are well-justified, since reductions in available fishery-related data are likely to compromise scientific advice. . STECF notes that its role in the evaluation of national programmes is better defined in the new DCR Framework Regulation.

Reg. 199/2008, Article 6, paragraph 2: “If the evaluation by STECF, referred to in paragraph 1, indicates that a national programme does not comply with Articles 4 and 5 or does not guarantee the scientific relevance of the data or sufficient quality of the proposed methods and procedures, the Commission shall immediately inform the Member State concerned and

propose amendments to that programme. Subsequently, the Member State concerned shall submit a revised national programme to the Commission.”

With regard to improving transparency on MSs derogations in future, STECF recommends that NPs shall include a separate section clearly listing all their proposed derogations and the underpinning reasons for the request. At the same time, STECF endorses the SGRN (meeting 07-04) recommendation to request “*information on the derogations granted and rejected so far since the beginning of the DCR and to give the arguments that prevailed for the decision*” which should be annexed to the 2007 Technical Reports.

Concerning the derogation requested by MSs for only undertaking triennial sampling for age for large pelagic species (tunas), STECF endorses the SGRN opinion that the triennial data collection must be synchronised across all member states with a starting year of 2002.

Apart from the issues outlined above, STECF endorses the findings and recommendations of the SGRN 07-04 report.

References:

COM 2008a. Draft COMMISSION DECISION (...) adopting a multi annual Community programme pursuant to Council Regulation (EC) No 199/2008 establishing a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy, 70 pp.

COM 2008b. Draft COMMISSION REGULATION (...) laying down detailed rules for the application of Council Regulation (EC) No 199/2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy, 7 pp.

8.5. Technical amendment to the Italian data collection national programme for 2008

Terms of reference

STECF is requested to evaluate and advise on the request by Italy regarding the harmonization of the trawl sampling gear used in the GRUND scientific trawl-survey with that used for the MEDITS scientific trawl survey".

STECF Observations

The Italian trawl survey program GRUND started in 1985 with the aim to collect data on geographical distribution, abundance, size structure at sea, and other biological information of demersal resources. Although national coordination resulted in a common sampling design, there has been no standardization of the net used in the different GSAs. At the outset the need to operate with different nets in the different GSAs was justified by the need to operate with local gears in order to take into account sea bed characteristics, the resources present and the power of the different vessels used in the survey (mostly chartered commercial fishing vessels of fairly different structural characteristics). This choice was further justified on the grounds that use of local gears may be able to provide estimates of discards by comparing survey data with commercial landings. In 1994, the international MEDITS project, involving many

Mediterranean countries, commenced. This project has a strict sampling protocol, including the use of specialised survey trawl, which is quite different to the gear used in the GRUND surveys. The vertical opening is 2-3 times higher in the case of MEDITS gear and the cod end mesh-size is 20mm for MEDITS compared to 40mm for GRUND. Both surveys now cover the same area and have an almost identical sampling protocol and same vessels. The only remaining differences are the gears in use and survey timing (Spring in MEDITS, Autumn in GRUND).

STECF notes that intercalibration exercises have been carried out but the results are highly variable and of limited use.

STECF Conclusions

STECF notes that the value of the GRUND survey time series is limited for stock assessment purposes because of changes of many of the vessels used over the time series and use of different gears in different GSAs.

STECF agrees that standardisation of the gear in the GRUND survey with that used in the MEDITS survey would be a positive step, which in time, is likely to provide a useful additional time series for the assessment of demersal species.

8.6. Harmonization of protocols of national acoustic surveys for small pelagic stocks in the Mediterranean

Background

SGRN in its meeting held in Brussels, 12-16 February 2007, reviewed the existing acoustic surveys in the Mediterranean (SGRN 07-01 Working Group report on review of list of surveys at sea). The need was identified of merging the national acoustic surveys in one internationally co-ordinated “Pan Mediterranean Pelagic Survey (MEDIAS)” so as to meet the prioritization criteria to be co-funded by DCR. Criteria are the following: internationally and harmonised surveys; surveys designed to inform management decisions; and data collected during surveys will have to be accessible to international scientific organisations and appropriate scientific bodies within Regional Fisheries Organisations.

In May 2007, a MEDIAS Steering Committee was established in the Regional Coordination Meeting held in Cyprus in May 2007. The report STECF is requested to review refers to the MEDIAS Steering Committee report of its meeting held in Athens, 25-28 February 2008, where a common protocol was discussed and adopted by the Steering Committee.

Terms of reference

STECF is requested to review the report of an ad-hoc meeting on future "MEDIAS" acoustic survey (Athens, 25-26 February 2008), evaluate the findings and make appropriate comments and recommendations.

STECF Observations

STECF compliments the Steering Committee on its work. All items relevant to acoustic surveys were dealt with. The description of the methodology followed in each area was presented and the different protocols were discussed, in order to highlight the similarities and

differences among them. The adopted common protocol by the Steering Committee included, for each area: survey identity (area, days at sea, vessel, period of survey), echo-sounder parameters, survey design, abundance indices, fish sampling, biological and oceanographic parameters.

The MEDIAS target species are anchovy and sardine. STECF notes that a number of issues need further clarification by the MEDIAS Steering Committee.

Duration (days) of the surveys in each area

The steering Committee agreed that acoustic sampling should be done during daytime in order that all surveys be harmonised. In order to ensure full coverage using daytime sampling only, there is a need to increase the duration of the surveys in Adriatic Sea and Sicilian Channel.

Survey timing

Surveys are being held during the second and third quarter of the year targeting the spawning stock of anchovy, and during the fourth quarter targeting anchovy recruitment. The Steering Committee agreed that MEDIAS will cover the major anchovy stocks during the spawning season (June to September). The spawning stock of the shared anchovy stock in the northwestern Mediterranean will be fully covered by a southern extension of the Gulf of Lions survey in summer. No information is given regarding the limits of this southerly extension. Thus, it is possible that part of the Iberian coast may not be covered by MEDIAS.

The Steering Committee recommends that the valuable time series of the Spanish recruitment survey should be continued (Iberian Coast, fourth quarter). This survey would not be part of MEDIAS.

Coordination of surveys in the Adriatic Sea

STECF stresses that for MEDIAS to cover the whole target species distribution, co-operation and co-ordination among all coastal countries, not all of them EU Member States, is needed. STECF suggests that this may be undertaken through the FAO regional project ADRIAMED.

MEDIAS coverage

STECF notes that from the information in the report of the Steering Committee, it seems that Ionian, Ligurian and Tyrrhenian Seas and part of the Iberian coast will not be covered. Therefore, MEDIAS would not cover the whole spatial range where the target species, anchovy and sardine, are distributed, and fleets operate. STECF suggests that the coverage of these areas is required to assess and provide management advice for the stocks in these areas. This implies that the number of days allocated to the survey may have to be increased.

STECF General Comments

The proposed standardisation and international co-ordination of Mediterranean acoustic surveys, carried out within the new DCR, will provide the required information for comparable assessment results and management advice for all small pelagic fish stocks concerned. Furthermore, quality control of the surveys will be facilitated. STECF agrees with the adoption of this common protocol for MEDIAS and recommends that the issues mentioned above should be clarified.

9. OTHER MATTERS

9.1. Provision of Integrated Advice

STECF is increasingly being asked to address questions that can best be answered through an integrated, interdisciplinary approach involving stock assessment scientists, biologists, gear technologists and fisheries economists. Recognising that to date, STECF has not developed an effective way of undertaking integrated interdisciplinary work, the Committee agreed to set aside time at the July 2008 plenary session to discuss options for the most effective way to proceed. To help facilitate the discussion, Dr Ralf Döring will prepare a paper, outlining a proposed approach using the issue of discarding as an example. The proposed discussion should be seen as a first step in a process to improve STECF's procedures to deal with complex issues in future WG and Plenary meetings.

9.2. STECF and SGRN

STECF notes that there are a range of issues that need to be addressed in relation to data collection, utilisation of reports from SGRN Working Groups and timing of SGRN meetings, including their interactions with other committees such as the RCMs. STECF therefore strongly recommends that the Commission together with the STECF Board and the chair of SGRN meet and address these issues to clarify and possibly change the current procedures.

9.3. STECF Rules of Procedures

STECF continued to draft its rules of procedure that are to be submitted to the Commission for approval. The consultation will continue by correspondence with the aim of adoption them at the STECF plenary meeting in July 2008, in Helsinki.

STECF notes that there are a range of issues that need to be addressed in relation to data collection, utilisation of reports from SGRN Working Groups and timing of SGRN meetings, including their interactions with other committees such as the RCMs. STECF therefore strongly recommends that the Commission together with the STECF Board and the chair of SGRN meet and address these issues to clarify and possibly change the current procedures.

10. ANNEX I FOR ITEM 2: CONTACT DETAILS OF PARTICIPANTS

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Raykov, Violin	Institute of Fishing Resources, PO Box 72 Primorski blvd. 4, Varna, 9000 Bulgaria	Tel. +359 52 624382 Fax +35952 618 136	vio_raykov@yahoo.com
Panayotova, Marina	Institute of Oceanology – Bas PO Box 152 Parninlaj 40 str. Varna, 9000 Bulgaria	Fax +359 52 370 483	mpanayotova@io-bas.bg
Radu, Gheorghe	National Institute for Marine Research and Development “Grigore Antipa”, Bdul. Mamaia, nr. 300 900581 Constanta	Tel. 40/241/543288 Fax 40/241/831274	gpr@alpha.rmri.ro
Maximov, Valodia	National Institute for Marine Research and Development “Grigore Antipa”, Bdul. Mamaia, nr. 300 900581 Constanta	Tel. 40/241543288 Fax 40/241831274	maxi@alpha.rmri.ro
Shlyakhov, Vladyslav A.	YugNIRO, 2, Svredlov Str., Kerch, Crimea, Ukraine	Tel. 38 065616 21012 Fax 38 06561 61627	fish@kerch.com.ua
Zengin, Mustafa	Central Fisheries Resarch Institute, Trabzon, Turkey.	Tel. +90 462341 1053- 56 Fax +90 462341 1152	mzengin@hotmail.com
Roel, Beatriz	CEFAS Lowestoft Laboratory, Pakefield Road, Lowestoft Suffolk, UK NR33 OHT	Tel. 0044 1502 524358 Fax 0044 1502 524511	beatriz.roel@cefass.co.uk
Villamor, Begoña	Instituto Español de Oceanografía, Promontorio de San Martín, 39004 Santander, Spain	Tel +34 942 291060 Fax +34 942 275072	begona.villamor@st.ieo.es
Abaunza, Pablo	Instituto Español de Oceanografía, Promontorio de San Martín, 39004 Santander, Spain	Tel. +34 942 291060 Fax + 34 942 275072	pablo.abauza@st.ieo.es
Pawlowski, Lionel	IFREMER, 8 rue François Toullec, 56100 Lorient, France		lionel.pawlowski@ifremer.fr
Uriarte, Andres	AZTI-Tecnalia, Herrera Kaia Portualdea z/g, 20110 Pasaia, Spain	Tel. +34 943004816 Fax + 34 943004801	auriarte@pas.azti.es

Sanchez, Sonia	AZTI-Tecnalia, Herrera Kaia Portualdea z/g, 20110 Pasaia, Spain	Tel. +34 943004800 Fax + 34 943004801	ssanchez@pas.azti.es
Perraudau, Yves	University of Nantes, LEN CORRAIL CHEMIN DE LA CENSIVE DU TERTRE, 44322 NANTES, France	Tel. 33680482956	yves.perraudau@univ- nantes.fr
Del Valle, Ikerne	University of Basque Country, Avda. Lehendakari Agirre 83, 48015 Bilbao, Spain	Tel. 34 94 601 7063 Fax 34 94 601 7087	ikerne.delvalle@ehu.es
European Commission			
Biagi, Franco	DG MARE	Tel. 0332 229 94104	Franco.biagi@ec.europa.eu
Lindemann, Jan- Henning	DG MARE	Tel. 0032 229 87086	Jan-henning.lindemann@ec.europa.eu
Daniel, Patrick	DG MARE	Tel. 0332 229 55458	Patrick.daniel@ec.europa.eu
Pertierra, Juan- Pablo	DG MARE	Tel. 0332 229 66443	Juan-pablo.pertierra@ec.europa.eu
Doerner, Hendrik	Joint Research Centre JRC	Tel: +39 0332789343 Fax: +39 03329658	Hendrik.doerner@jrc.it
Folisi, Floriana	Joint Research Centre JRC	Tel: +39 0332783555 Fax: +39 03329658	Floriana.folisi@ec.europa.eu
Raetz, Hans- Joachim	Joint Research Centre JRC	Tel: +39 0332786073 Fax: +39 03329658	Hans-joachim.raetz@ec.europa.eu
Nord, Jenny	Joint Research Centre JRC	Tel: +39 0332785311 Fax: +39 03329658	Jenny.nord@jrc.it

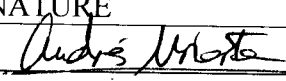
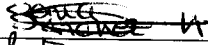
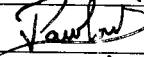
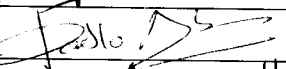
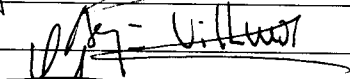
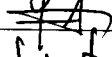

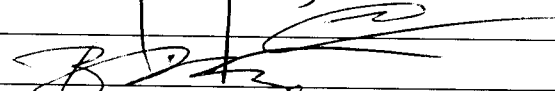
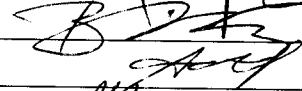
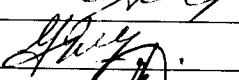
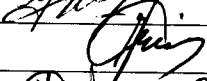
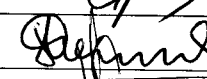
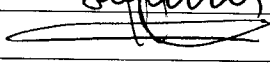
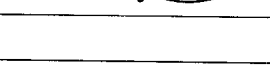
11. ANNEX II FOR ITEM 3.1: DECLARATIONS OF EXTERNAL EXPERTS

ANNEX I

Scientific, Technical and Economic Committee for Fisheries (STECF)
DECLARATION of COMMITMENT
EXTERNAL EXPERTS

I undertake to:

act independently in the public interest of the European Union and to make complete declarations of any direct or indirect interests that might be considered prejudicial to my independence.

NAME	SIGNATURE
ANDRES URIARTE	
SONIA SANCHEZ	
LIONEL PAWLOWSKI	
PABLO ABAUNZA	
BEGONA VILLAMOR	
Yves Pennaudes	
Mustafa Zengin	
Vladyslav Shlyakhov	
Violen Raykov	
Marina Ranyotova	
Gheorghe RADU	
VALODIA MAXIMOV	
GEORGI DASKALOV	
IKERNE DEL VALLE	

Done at on

ANNEX III

Scientific, Technical and Economic Committee for Fisheries (STECF) DECLARATION CONCERNING CONFIDENTIALITY EXTERNAL EXPERTS


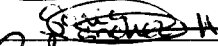
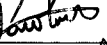

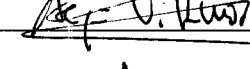
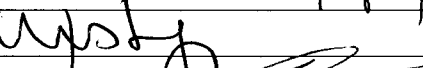

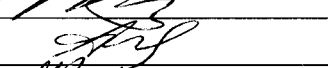
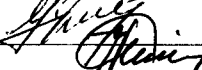
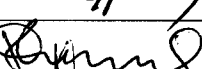
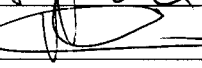

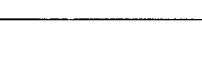

I hereby declare that I am aware of my obligation to respect confidentiality. I know that I am obliged not to divulge information acquired as a result of the work of the Committee, or one of its Working groups.

I am aware that when informed that an agenda item is confidential in accordance with Article 14 (2) of Commission Decision 2005/629/EC only members of the STECF and Commission representative shall be present at that working group.

I shall also respect the confidential nature of the scientific opinions expressed by members of the Committee or the external experts during discussions in Committee or in working groups.

I undertake not to disclose such information even after my participation in the work of the STECF has ceased.

I undertake also to destroy any information and document I have received under the clause of confidentiality.

NAME	SIGNATURE
ANDRES URIARTE	
Sonia Sanchez	
LIONEL PAWLOWSKI	
PABLO ABAUNZA	
ISGOWA VILLAMOR	
Yves PERRAudeau	
Mustafa Zengin	
Vladyslav Shlyakhov	
Violin Raykov	
Marina Panayotova	
George RADU	
VALODIA MAXIMOV	
GEORGI DUSKALOV	
IKERNE DEL VALLE	

ANNEX II

DECLARATION of INTERESTS (to be filled in by STECF external experts)

Name: LIONEL PAWLOWSKI

☒ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August. 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

I WORK FOR IFREMER FRENCH INSTITUTE OF THE
RESEARCH OF THE EXPLOITATION OF THE SEA

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

/

Interests deriving from the professional activities of the applicant or his/her close family members:

/

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at HAMBURG on 15/04/2008

Signature



³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

ANNEX II

DECLARATION of INTERESTS (to be filled in by STECF external experts)

Name: SANCHEZ MARINO, SONIA

☒ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August, 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

I work for AZTI

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

Interests deriving from the professional activities of the applicant or his/her close family members:

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at Hamburg on 15th April 2008

Signature

³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

Name: DEL VALLE ERKIARGA IKERNE

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August. 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

Scientific interest.

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

NO

Interests deriving from the professional activities of the applicant or his/her close family members:

NO

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

Prolesor University of the Basque Country .
Department of Economics

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

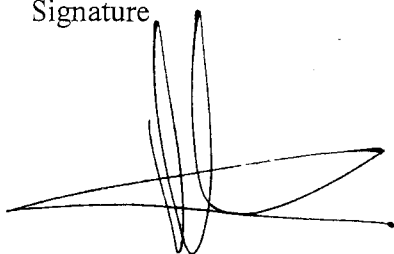
Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at Hamburg on 16/04/2008

Signature

A handwritten signature consisting of several loops and a long horizontal stroke.

³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

Name: **GEORGI DASKALOV**

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August. 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

I work with Cefas, Lowestoft, UK

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

Interests deriving from the professional activities of the applicant or his/her close family members:

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

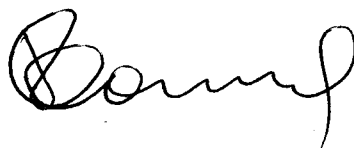
Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at *Hamburg* on *16/04/2008*

Signature



³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

ANNEX II

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

Name: **MAXIMOV VALODIA**

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August, 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

I am working in the National Institute for Marine Research "Grigore Antipa" Constanta. Romania

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

NO

Interests deriving from the professional activities of the applicant or his/her close family members:

NO

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

No

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

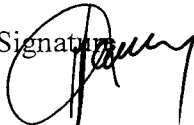
No

Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at *Hamburg* on *16. of 2007*

Signature 

³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

Name: *Vladyslav Shlyakhev*

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August, 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

*I'm working in the Southern Scientific Research
Institute of Marine Fisheries and Oceanography (YugNIRO)
Focal Point at Advisory Group FOMLR, BSC*

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

No

Interests deriving from the professional activities of the applicant or his/her close family members:

No

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

AG FOMLR Black Sea Commission

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

No

Declaration

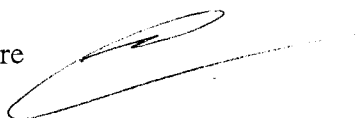
I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at *Hamburg* on

16.04.2008

Signature



³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

ANNEX II

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

Name: *Marina Panayotova*

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August. 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

Working in the Institute of Oceanology, Bulgarian Academy of Sciences, Varna, Bulgaria

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

NO

Interests deriving from the professional activities of the applicant or his/her close family members:

NO

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

NO

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

NO

Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at *Hamburg* on *16. 04. 2008*

Signature



³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

Name: *Violin Stoyanov Raykov*

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August, 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

I am working at Institute of Fishing Resources - VARNNA, BULGARIA. I am a FOCAL POINT of Advisory Group of FOMLR in Black Sea Commission and I am a member of WG "FISHERIES" to the Ministry of Agriculture and Food Supply

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

NO

Interests deriving from the professional activities of the applicant or his/her close family members:

NO

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

AG FOMLR in BSC

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

No

Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

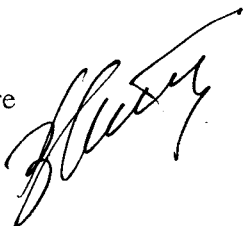
Done at

on

Hamburg

16.04.2008

Signature



³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

ANNEX II

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

Name: *RADU GHEORGHE*

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August. 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

I am working in the National Institute for Marine Research and Development "Grigore Antipa" Constanta, Romania. I am also Focal Point for Fisheries in the Black Sea Committee.

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

No

Interests deriving from the professional activities of the applicant or his/her close family members:

No

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

N/O

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

AG. FOMLR in the Black Sea Commission.
(Advisory Group for Fishery Management and Other Marine
Living Resources)

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

N/O

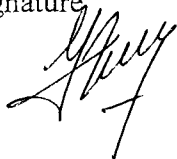
Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at HAMBURG on 16.04.2008

Signature



³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

Name: Dr. Mustafa Tenzin

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August. 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

→ I have work related to MARA,
→ my Institute is Central Fisheries Research Inst.
→ I am a senior researcher
→ I have several project leader and researcher

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

Interests deriving from the professional activities of the applicant or his/her close family members:

—

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

- Advisory Committee of the Black Sea Commission (BSC) of Fisheries (2003--2008)
- Black Sea Fisheries Workshop by JRC - 2006-October, I was local focal point.

→ GFCM / Demersal/Pelagic Stock Assessment Sub Committee
Other interests or facts that the undersigned considers pertinent as a member of an independent STECF: Expert.

- MARE and EU Fisheries Negotiations, New Twinning project on the Research (fish) facilities in 2008-2009. I joined preliminary meeting for Turkey side expert.

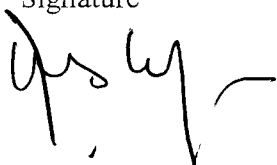
Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at Hamburg on 15 April 2008.

Signature



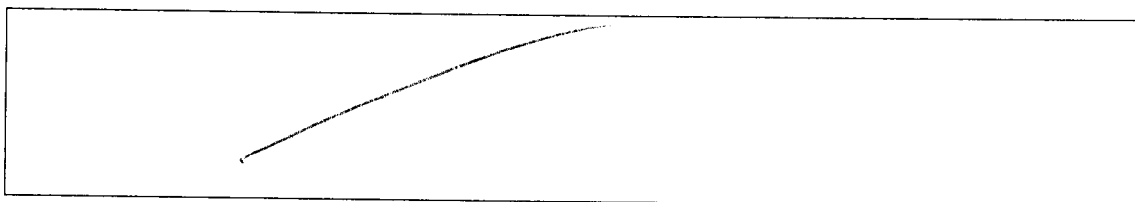
³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

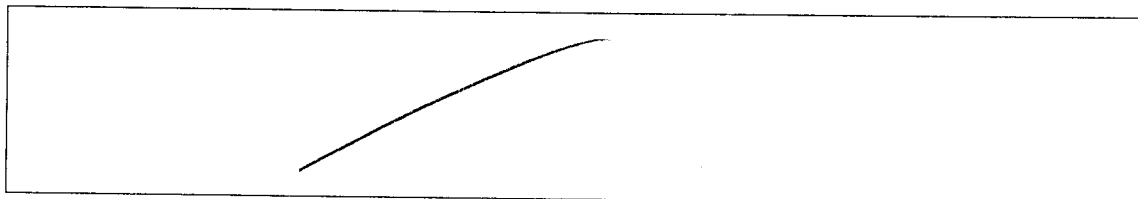
Name: **ANDRES URIARTE**

☒ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August. 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

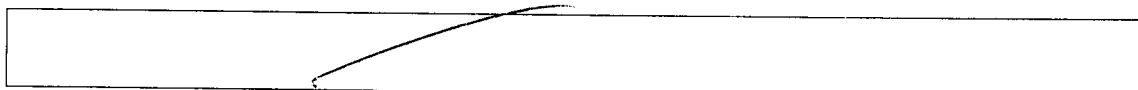
Direct interest (for example related to employment, contracted work, investments, fees etc.):



Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.



Interests deriving from the professional activities of the applicant or his/her close family members:



¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at HAMBURG on April 15th 2008

Signature

Anders Mørte

³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

ANNEX II

DECLARATION of INTERESTS (to be filled in by STECF external experts)

Name: PABLO ABAUNZA

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August. 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

Only scientific interest because my professional work is at a Scientific organization of the Spanish Government (Spanish Institute of Oceanography)

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

No

Interests deriving from the professional activities of the applicant or his/her close family members:

No

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

~~Only~~ Only my professional work at the Spanish Institute of Oceanography

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

Only my professional work at the Spanish Institute of Oceanography

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

/

Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at Hamburg on 15-04-08

Signature

1250 MB

³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

Name: *Begoña Villamor*

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August. 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

Scientific interest related to employment

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

no

Interests deriving from the professional activities of the applicant or his/her close family members:

no

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

Professional interest, scientific because my organization is a Government scientific that is interesting in the work of the STECF.

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

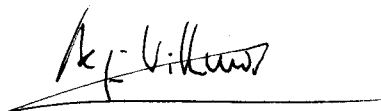
no

Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at Hamburg on 14 - April 2008



Signature

³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.

DECLARATION of INTERESTS
(to be filled in by STECF external experts)

Name: PERRAUDEAU YVES

☐ In accordance with Article 13(2) of Commission Decision 2005/629/EC of 31 August. 2005 establishing a Scientific, Technical and Economic Committee for Fisheries¹, I hereby notify the Commission that I have the following economic or ethical interests² which might be considered prejudicial to my independence:

Direct interest (for example related to employment, contracted work, investments, fees etc.):

Indirect interests e.g. grants, sponsorships, or other kind of benefits such as gifts, invitations and honorariums.

Interests deriving from the professional activities of the applicant or his/her close family members:

¹ OJ L 225, 31.08.2005, p.18 as corrected by OJ L 316, 02.12.2005, p.23.

² Links which could be considered interests might include:

- one's job (university, institute, public service, enterprise)
- being a member of a board of directors, board of management or any other supervisory body within a company, association, Member State administration, non-governmental organization, governmental organization etc.
- having carried out scientific research or provided an expert opinion at the request of a company, public service, Member State administration, non-governmental organization, governmental organization etc.

Any membership role or affiliation that you have in organizations/bodies/club with an interest in the work of the STECF:

ancien membre du CSTEP
invité à ce meeting - "Anchois"

Other interests or facts that the undersigned considers pertinent as a member of an independent STECF:

Declaration

I declare that the information provided above is true and complete.

I shall immediately and explicitly inform the STECF of any specific interest³ concerning any question submitted by the Commission on the occasion of the meeting at which the relevant question is to be examined by the Committee. I shall inform the Commission of any change with regard to my interests which could be prejudicial to my independence.

Done at Hamburg on 15/04/2008

Signature



³ See previous footnote 1: a special interest could, in particular, comprise any prior activity concerning the subject of the question.