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29th PLENARY MEETING REPORT OF THE SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (PLEN-08-03)

PLENARY MEETING, 3-7 NOVEMBER 2008, BRUSSELS

Edited by John Casey & Hendrik Dörner

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29th PLENARY MEETING REPORT OF THE SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (PLEN-08-03)

PLENARY MEETING

3-7 NOVEMBER 2008, BRUSSELS

1. INTRODUCTION

STECF met at the MAI – Maison des Associations Internationales, Brussels, from 3 to 7 November 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 7 November.

2. LIST OF PARTICIPANTS

Contact details are attached in ANNEX I.

MEMBERS OF THE STECF:

Abella, J. Alvaro (Rapportuer, Black Sea stocks)
Andersen, Jesper Levring (Vice-chair)
Bailey, Nick (Rapporteur, Assessment of fishing effort regimes)
Cardinale, Massimiliano (Rapporteur, Evaluation of the SGMED achievements)
Casey, John (Chair)
Curtis, Hazel (Rapporteur, Commission's summary annual report on MS report fishing capacity – opportunities)
Daures, Fabienne (Rapporteur, Evaluation of the 2007's technical reports)
Di Natale, Antonio (Vice-chair)
Dobby, Helen (Rapporteur, Baltic fishing effort system/ possible derogation for flatfish fishery)
Döring, Ralf (Rapporteur, Interdiciplinary working)
Figueiredo, Ivone (Rapporteur, German surveys on discards)
Graham, Norman (Rapporteur, First evaluation of the UK cod avoidance measures)
Gascuel, Didier (Rapporteur, Celtic Sea herring)
Gustavsson, Tore
Hatcher, Aaron
Kirkegaard, Eskild (Rapporteur, Evaluation of cod catches in Baltic Sea subdivisions 27 & 28)
Kuikka, Sakari
Martin, Paloma (Rapporteur, Hake Gulf of Lions)
Prellezzo, Raul (Rapporteur, harvest control rule to in the Cod Recovery plan for Celtic Sea)
Sabatella, Evelina
Somarakis, Stylianos
Stransky, Christoph (Rapporteur, Evaluation of the Technical Report 2007 for UK)
Vanhee, Willy (Rapporteur, stock review)
Van Hoof, Luc (Rapporteur, Co-ordination with ICES)
Van Oostenbrugge, Hans (Rapporteur, Preparation of the 2009 Annual Economic Report)

INVITED EXPERTS:
Vigneau, Joel

EUROPEAN COMMISSION:

DG- Maritime Affairs and Fisheries (MARE)
Calvo, Angel
Cervantes, Antonio
Daniel, Patrick
Lindebo, Erik
Roitman, Michael

Joint Research Centre (JRC)
JRC experts:
Guillen, Jordi (Preparation of Annual Economic Report 2009)
Rätz, Hans-Joachim (Fishing effort regimes, Mediterranean and Black Seas)

STECF secretariat:
Dörner, Hendrik
Folisi, Floriana

Members of the STECF not present:

The following members of the STECF informed the secretariat that they were not able to attend the meeting:
Parkes, Graeme
Polet, Hans
Kraak, Sarah
Virtanen, Jarno

The following members of the STECF did not inform the secretariat that they were not able to attend the meeting:
Balguerias, Eduardo

3. TERMS OF REFERENCE

The terms of reference included both issues assessments of STECF working group reports and additional requests submitted to the STECF by the Commission. The two categories are distinguished below.

3.1. INFORMATION FROM THE COMMISSION, ORGANIZATIONAL MATTERS

The Commission will inform the STECF on the state of play regarding the approval of STECF Rules of Procedures, present proposals on how possibly to improve workflow on scientific advices, and inform on attempts to improve coordination with ICES STECF.

3.2. ASSESSMENT OF STECF WG REPORTS

3.2.1. Evaluation of the 2007's technical reports (DCR)

DG Mare focal person: Antonio Cervantes
STECF is requested to review the report of the **SGRN-08-02** of June 30 – July 5, 2008 (Ispra) meeting, evaluate the findings and make any appropriate comments and recommendations.

Terms of reference
1. Evaluation of 2007 TR's

The advice should consider at least the measures taken by each MS, the appropriateness of the methods used and the results achieved as regards data collection and data uses. The aim is to deliver a critique scientific review of the situation by evaluating what MSs had proposed in their National Programmes for 2007 and what they have finally achieved. Evaluation of the achievements should consider the international obligations of the EU in regards to the Regional Fisheries Organizations, the transmission and the uses of the data and the quality aspects. ICES will provide tables on data flow to illustrate the discussion.

2. Pilot studies: State of play and missing reports;

3. BluefinTuna and Swordfish Tagging 2005-2007: Summary of actions undertaken by Member states and evaluation;

4. Evaluation of the situation regarding the response by MS to the call for economic data launched to produce the draft report on the "Economic Performance of EU Fishing Fleet: Annual Report 2008"

5. SGRN 08-01: Presentation of the main outputs of the meeting and establishment of sound scientific criteria for the evaluation of NP and TR (as recommended by SGRN 08-01)

3.2.2. Assessments of fishing effort regimes

DG Mare focal persons: Jan Lindemann & Patrick Daniel

STECF is requested to review the report of the **SGRST-08-03** of September 1-5, 2008 (Lysekil) meeting, evaluate the findings and make any appropriate comments and recommendations.

The working group was requested for:

1 – an assessment of fishing effort deployed by fisheries and métiers which are currently affected by fishing effort management schemes defined in Annex II to Regulation (EC) No 40/2008;

2 – an assessment of fishing effort deployed by fisheries and metiers, which will be affected by the extension of the cod recovery plan to the Celtic Sea.

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to each of the following fishing areas:

Areas covered by Annex IIA

a. Kattegat (ICES functional unit IIIaS),
b. (i) Skagerrak (ICES functional Unit IIIaN), (ii) North Sea (EC waters of ICES sub-area II and ICES sub-area IV), (iii) Eastern channel (ICES division VIId)
c. West of Scotland (ICES division VIa)
d. Irish Sea (ICES division VIIa)

Areas covered by Annex IIB

e. Atlantic waters of the Iberian Peninsula (ICES divisions VIIIc and IXa, excluding the Gulf of Cadiz)

Areas covered by Annex IIC

f. Western Channel (ICES division VIIe)

New areas related to the assessment request

g. Celtic Sea (total of ICES divisions VIIb, VIIc, VIIe, VIIf, VIIg, VIIh, VIIj and VIIk and total for the subset of ICES divisions VIIf and VIIg)

The data should also be broken down by

- ✓ Member State ;
- ✓ regulated gear type and by associated special conditions defined in Annex II as far as relevant ;
- ✓ unregulated gear types catching
  - o cod in fishing areas a, b(i), b(ii), b(iii), c, d and g;
  - o sole in fishing areas b(i), b(ii), b(iii) and f;
  - o plaice in fishing areas b(i), b(ii) and b(iii),
  - o hake and Norway lobster in fishing area e

for the following parameters:

a. Fishing effort, measured in kW.days and in GT.days and in number of vessels concerned

b. Catches (landings and discards provided separately) of
- ✓ cod, sole and plaice in areas covered by Annex IIA,
- ✓ hake and Norway lobster in areas covered by Annex IIB,
- ✓ sole in areas covered by Annex IIC,
- ✓ cod in the Celtic Sea,

by weight and by numbers at age.

c. Catches (landings and discards provided separately) of
- ✓ non-cod , non-sole and non-plaice in areas covered by Annex IIA,
- ✓ non-hake and non-Norway lobster in areas covered by Annex IIB,
- ✓ non-sole in areas covered by Annex IIC,
- ✓ non-cod in the Celtic sea catches (landings and discards)

by species, by weight and by numbers at age

d. Catch per unit effort (cpue) of
- ✓ cod, sole and plaice in areas covered by Annex IIA,
- ✓ hake and Norway lobster in areas covered by Annex IIB,
- ✓ sole in areas covered by Annex IIC,
- ✓ cod in the Celtic Sea.

2. Based on the information compiled under point (1) above, to rank gear types, with and without associated special conditions, on the basis of their contribution to catches expressed both in weight and in number of
- ✓ cod, sole and plaice in areas covered by Annex IIA,
- ✓ hake and Norway lobster in areas covered by Annex IIB,
- ✓ sole in areas covered by Annex IIC,
- ✓ cod in the Celtic Sea.

3. If relevant data are available, to comment on the quality of estimations on total catches and discards.

4. To assess the fishing effort and catches (landings and discards) of
- ✓ cod, sole and plaice in areas covered by Annex IIA,
- ✓ hake and Norway lobster in areas covered by Annex IIB,
- ✓ sole in areas covered by Annex IIC,
- ✓ cod in the Celtic sea

and associated species corresponding to vessels of length overall smaller than 10 metres in each fishery, by gear (corresponding to regulated and unregulated gear as defined in Annex II framework) and by Member State according to sampling plans implemented to estimate these parameters.

5. To describe the spatial distribution of the fishing effort deployed both in the Celtic Sea and in the context of Annexes IIA, IIB and IIC to Regulation (EC) No 41/20007, according to data reported in logbooks on the basis of ICES statistical rectangles, with the aim to determine to what extent fishing effort has moved from long distance to coastal areas since the implementation of the days-at-sea regime for the first time in 2003 (Annex XVII to Regulation (EC) No 2341/2002).

6. Based on information compiled under point (1), on assessments done under point (2), (3), (4) and (5) and on the definition of métier adopted on level 6 of the matrix developed by the STECF-SGRN and STECF-SGECA Working Groups, to highlight métiers
- ✓ that are affected by rules defined in fishing effort regimes defined in Annex II for each of the areas a, b(i), b(ii), b(iii), c, d, e and f or
- ✓ that would be affected by a possible extension of the fishing effort (Annexe IIA) related to the cod recovery plan to the Celtic Sea.

In both cases and for each métier which will have been identified, it is requested to specify economic data which are already available or which should be requested to Member States to allow assessment of any change in fishing effort management schemes related to Annex II.

During this process, it is requested that that STECF-SGRST Working Group attempt

- ✓ to classify combinations of grouping of fishing gears and special conditions, as currently define in Annex II, according to the typology suggested by the STECF-SGRN.
- ✓ to notice
  - o when aggregations of combinations may be suggested (e.g. when such combinations cover a similar métier)
  - o when separation of combinations may be suggested (e.g. when such combinations cover two different métiers, or more).

3.2.3. Mediterranean – Evaluation of the SGMED achievements and related advices

DG Mare focal person: Franco Biagi

STECF is requested to review the work accomplished by SGMED in 2008, with particular attention to the report of the SGMED-08-04 of October 6-10, 2008 (Ponza) meeting, evaluate the findings and make any appropriate comments and recommendations with the view also to steer SGMED towards the goals of the framework mandate for STECF as given at the SGMED 08-01 of 14 March 2008.

STECF is, in particular, requested to:

a) assess the status and trends of the stocks of **sardine** (Sardina pilchardus) by all relevant GSAs, or, if the case, by bigger areas merging adjacent GSAs, in the Mediterranean Sea and provide short term, medium term and long term forecasts of stock biomass and yield under different management options, by fisheries if possible. Advise on the status of the exploited stocks with respect to high yields harvesting strategies and to maintain their reproductive capacity and ensure a low risk of stock collapse.

b) assess the status and trends of the stocks of **anchovy** (Engraulis encrasicolus) by all relevant GSAs or, if the case, by bigger areas merging adjacent GSAs, in the Mediterranean Sea and provide short term, medium term and long term forecasts of stock biomass and yield under different management options, by fisheries if possible. Advise on the status of the exploited stocks with respect to high yields harvesting strategies and to maintain their reproductive capacity and ensure a low risk of stock collapse.

c) assess the status and trends of the stocks of **hake** (Merluccius merluccius) by all relevant GSAs or, if the case, by bigger areas merging adjacent GSAs in the Mediterranean Sea and provide the status together with short term, medium term and long term forecasts of stock biomass and yield under different management options, by fisheries if possible. Advise on the status of the exploited stocks with respect to high yields harvesting strategies and to maintain their reproductive capacity and ensure a low risk of stock collapse.

d) assess the status and trends of the stocks of **red mullet** (Mullus barbatus) by all relevant GSAs or, if the case, by bigger areas merging adjacent GSAs in the Mediterranean Sea and provide the status together with short term, medium term and long term forecasts of stock biomass and yield under different management options by fisheries if possible. Advise on the status of the exploited stocks with respect to high yields harvesting strategies and to maintain their reproductive capacity and ensure a low risk of stock collapse.

e) assess the status and trends of the stocks of deep-sea rose shrimp (Parapenaeus longirostris) by all relevant GSAs or, if the case, by bigger areas merging adjacent GSAs in the Mediterranean Sea and provide the status together with short term, medium term and long term forecasts of stock biomass and yield under different management options by fisheries if possible. Advise on the status of the exploited stocks with respect to high yields harvesting strategies and to maintain their reproductive capacity and ensure a low risk of stock collapse.

f) assess historic and recent trends (capacity, technological creep, nominal fishing effort) in the major fisheries by GSAs or, if the case, by bigger areas merging adjacent GSAs exploiting the stocks assessed. The trends should be interpreted in light of management regulations applicable to them.

g) review and propose biological reference points related to high yields and low risk of stock collapse in long term of each of the stocks assessed. Set up stock-size dependent harvesting strategies and slope-based approaches decision control rules to avoid risk situations for the stocks while ensuring higher fisheries productivity

h) identify any needs for management measures required to safeguard the stocks assessed.

i) review the applicability and fully document all applied methodologies for the assessments, projections and determination of the proposed biological reference points.

j) fully document the data used and their origin for the assessments, projections and determination of the proposed biological reference points.

k) review social and economic reference points. Advice on possible short-term economic consequences of the selected long-term harvesting strategies. Evaluate whether the proposed long-term harvesting strategies are compatible with long-term economic profitability (MEY) of the main fisheries exploiting the assessed stocks.

l) provide and review population and community indicators.

m) propose a detailed SGMED working plan for 2009 including data, meetings and facilities needed regarding methodology standardization and continuation of the assessments of small pelagic and demersal stocks in the Mediterranean Sea and of the provision of scientific advice for the fisheries exploiting such resources. In particular, such plan should consider availability of recent survey data to provide short term projections. The timing should also allow EU scientists to deliver a higher number of stocks assessments into the GFCM-SAC advisory mechanism as well as, if the case, to prepare the basic data and analysis for possible joint assessments therein.

n) suggest adjustments and provide guidance on data needs and quality, on methods and on interpretations so that SGMED work can further progress in 2009 towards the goals of the overall mandate given to STECF focusing its attention, in particular, on the various stocks of the following species: European hake, red mullet, blue whiting, common Pandora, red sea bream, axillary seabream, common sole, horse mackerel, greater forkbeard, poor-cod, sargo breams, picarels, bogue, Sea bass, Anglerfishes, gilthead sea bream, tub gurnard, mackerel, common dolphinfish, sardine, anchovy, sprat, deepwater rose shrimp, Norway lobster, red-shrimp, blue-and-red shrimp, Atlantic bonito, stripe-bellied bonito, bullet tuna.

Background

The European Community is expecting 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.

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 and trends of the main demersal and small pelagic stocks and evaluate the exploitation levels with respect to their biological and economic production potentials and the sustainability of the stock.

An overall framework mandate has been given to STECF (SGMED 08-01, 10-14 March 2008).

Use of 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 through

studies and research projects funded either at national and/or Community levels in the last 25 years was requested.

3.2.4. Review of scientific advice on stocks of Community interest – part 2

DG Mare focal person: Patrick Daniel

STECF is requested to review the report of the SGECA-SGRST-08-03 of October 20-24, 2008 (Fuengirola) meeting, evaluate the findings and make any appropriate comments and recommendations.
In accordance with Article 3 of Commission Decision 629/2005 of 26 August 2005 establishing a Scientific, Technical and Economic Committee for fisheries, STECF is requested to:

- Review the advice from ICES for 2009-2010 and make any appropriate comments or recommendations for the following stocks:
    - Hake in ICES division IIIa, ICES suabreas IV, VI & VII, ICES division VIIIa, VIIIb, VIIId
    - Northeast Atlantic mackerel
    - Western horse mackerel (*Trachurus trachurus*) in ICES divisions IIa, IVa, Vb, VIa, VIIa-c, VIIe-k
    - Blue whiting in ICES subareas I-IX, XII & XIV
    - Norwegian spring spawning herring

- Review the most recent advice for stocks of interest to the EU from the following regions:
    - Stocks in the area of CECAF
    - Stocks in the area of WECAF
    - Stocks under the jurisdiction of CCAMLR
    - Stocks under the jurisdiction of GFCM (consistency or incongruities with SGMED achievements and advices shall be highlighted).
    - Stocks under the jurisdiction of ICCAT
    - Stocks under the jurisdiction of IOTC
    - Stocks under the jurisdiction of IATTIC
    - Stocks under the jurisdiction of ICCAT
    - Stocks in the Southeast Atlantic
    - Stocks in the Southwest Atlantic

In addition STECF is requested to provide a Description of environmental issues and fishery re sources status of the EEZ outermost regions

DG Mare focal person: Armando Astudillo

Background

In the context of the formal requirement, STECF has to draw up an annual report on the status of Community fisheries including biological, economic and social aspects. Although in practice this review is more concentrated on stocks under the TAC regime, it is also convenient, for monitoring purposes, to include all Community fisheries independently from their legal status within the CFP. However, stocks around outermost regions (OR's) have not been assessed systematically by this committee and the last assessments known are for prawn and red snappers of French Guyana in 2003.

Terms of reference

For fishery resources of the EEZ around outermost regions (Azores, Madeira, Canaries, French Guyana, Martinique, Guadeloupe and La Réunion), STECF is requested:

1) to describe the main fisheries exploited either by local fleets or by foreign fleets within the EEZ. The description should cover fish stock status, fishing fleets, fishing techniques and economic and social performance of these fisheries.

- A description of fisheries exploiting local, resident stocks around the Azores, Madeira and the Canary Islands. Where possible, provide an assessment of stock status and an evaluation of the economic situation of the fleet exploiting such stocks.

- A description of fisheries exploiting local, resident stocks around Réunion Island. Where possible, provide an assessment of stock status and an evaluation of the economic situation of the fleet exploiting such stocks.

- A description of fisheries exploiting local, resident stocks around French Guyana, Martinique and Guadeloupe. Where possible, provide an assessment of stock status and an evaluation of the economic situation of the fleet exploiting such stocks.

- In the case un Guyana, describe and assess separately:
  - Coastal fisheries exploiting white fish (poissons blancs)
  - Coastal fisheries (including foreign vessels) exploiting red fish (poissons rouges, especially red snapper) and sharks
  - Fisheries exploiting *Penaeus* shrimps

2) to describe the main environmental issues related to these fisheries: by-catch of sensitive species, effects of fisheries on natural habitats and influence of the environmental quality of the water on fisheries performance.

3.3. ADDITIONAL REQUESTS SUBMITTED TO THE STECF PLENARY BY THE COMMISSION

3.3.1. Evaluation of cod catches in Baltic Sea subdivisions 27 & 28

DG Mare focal person: Stefanie Schmidt

Background

Article 29 of Council Regulation (EC) No 1098/2007 of 18 September 2007 establishing a multi-annual plan for the cod stocks in the Baltic Sea and the fisheries exploiting those stocks, requires the Commission to decide on an annual basis about the application of the fishing effort management limits defined in Article 8 of the same regulation in Subdivisions 27, 28.1 and 28.2.

Terms of References

The Commission requests STECF to advise if catches of cod in the period 1 October 2007 to 30 September 2008 in Subdivisions 27 and 28.2 were lower than 3% of the total catches in Subdivisions 25 to 28 and if the catches in Subdivision 28.1 were higher than 1.5 % of the total catches in Subdivisions 25 to 28.

3.3.2. Baltic fishing effort system/ possible derogation for flatfish fishery

DG Mare focal person: Stefanie Schmidt

Background

Article 8 of Council Regulation (EC) No 1098/2007 establishing a multi-annual plan for the cod stocks in the Baltic Sea and the fisheries exploiting those stocks is establishing a fishing effort system for fishing vessels fishing with trawls, Danish seines or similar gear of a mesh size equal to or larger than 90 mm, with gillnets, entangling nets or trammel nets of a mesh size equal to or larger than 90 mm, with bottom set lines, longlines except drifting lines, handlines and jigging equipment.

The system consists of closed periods and days absent from ports, which are set on an annual basis according to the rules defined in Article 1. In order to allow small-scale fishing with a low impact on cod (low cod catches and/or targeting for other species such as flatfish), vessels below 12m can use up to 5 days absent form port per month during the closed periods.

The BS RAC has taken the position that the effort scheme for the management of the cod fishery has limiting effects on other fisheries and suggested to the Commission to evaluate the derogation for small-scale vessels with regards to the flatfish fishery with 140-220mm and to exclude vessels using nets with mesh size above 220mm from the effort limitations.

Terms of References

In light of the requests from the BS RAC to the Commission, the Commission requests STECF:

1. To analyse for vessel groups 8-12m and 12-24m vessel length and the different gear categories defined in the Baltic cod plan (subdividing gillnets by mesh size groups 90-140mm/140-220mm/>220mm) by Member State the catch composition with these gears taking account of seasonal and regional differences and

2. To advice on a potential exclusion of fishing vessels using nets with mesh size above 220mm from the effort limitations in light of the objectives and targets defined in the management plan for Baltic cod.

3.3.3. STECF opinion on the Commission's summary annual report on Member States' efforts during 2006 to achieve a sustainable balance between fishing capacity and fishing opportunities

DG Mare focal person: Casto Lopez Benitez

Background

In accordance with Article 14 of Council Regulation (EC) No 2371/2002 and Article 12 of Commission Regulation (EC) No 1438/2003, the Member States and the European Commission have the following obligations:

1. Each Member State shall submit its annual report on its efforts during the year 2007 to achieve a sustainable balance between fishing capacity and fishing opportunities to the Commission by 30 April 2008.

2. The Commission, on the basis of the data in the Community Fleet Register and information contained in the Member States' annual reports, shall prepare a summary annual report and

present it to the Scientific, Technical and Economic Committee for Fisheries and to the Committee for Fisheries and Aquaculture before 31 July 2008.

3. These two above-mentioned Committees shall transmit their opinion back to the Commission no later than 31 October 2008.

4. The Commission's summary with the Member States' reports attached, accompanied by the opinions of the above mentioned two Committees, shall be sent to the European Parliament and the Council before 31 December 2008.

Terms of reference

The STECF is requested to review the Commission's summary annual report on Member States efforts during 2007 to achieve a sustainable balance between fishing capacity and fishing opportunities, evaluate the findings and make any appropriate comments and recommendations. Particular attention should be paid to Member States which have implemented the 'Guidelines for an improved analysis of the balance between fishing capacity and fishing opportunities' produced by and ad-hoc working group of the STECF.

3.3.4. First evaluation of the UK cod avoidance measures introduced in 2008

DG Mare focal person: Jan Lindemann

Background

1. Alternative effort scheme

The effort limits in days at sea have been reduced in the North Sea by 10% for trawlers >70mm, and to the West of Scotland by 11% (trawlers 70-90mm) and 18% (trawlers >100mm) respectively. Concerning these effort limits, it was agreed that Member States could refrain from eventual effort-cuts in exchange for active cod avoidance practice followed by fishermen, by applying an alternative effort management using baskets of kW-days. This agreement anticipated in particular a Scottish initiative planned for 2008, the Conservation Credit Scheme.

From February 2008, the UK has implemented such an alternative effort-management scheme, including the Conservation Credit Scheme. The scheme applies English, Northern Irish and Scottish trawlers and seiners in two effort groups, namely >70<90mm and >100mm mesh size. The areas covered are the North Sea and West of Scotland. The system was introduced with an "opt-out" mechanism; that is it was assumed that all vessels participated, and that those not wishing to participate or not fulfilling the conditions to participate would be excluded as and when this became apparent.

Participating vessels have received an effort allocation which is unchanged with respect to 2007. The overall limitations in the effort groups as resulting from the limits in days at sea for 2008 must nevertheless be respected by the UK. This is possible because not all vessels within an effort group will make use of the allocation, and the UK can in addition draw on an important number of additional days that have been permanently assigned to certain UK fleet segments in recent years, and can do a mixed calculation.

So far, the UK has not requested additional days for 2008 going beyond the existing limitations. The implementation of the scheme will therefore, in terms of effort, respect the limits set in days at sea for the different types of vessels, and result in an effort deployment in 2008 that is limited by the 2007 allocation at national level. An evolution in effort deployment per gear and area might occur due lower uptake levels of effort overall, or because of a difference in the special deployment of the effort.

2. Purpose of the scheme at measures designed to serve this purpose

The declared purpose of the scheme is to reduce cod mortality and discards. The UK, and in particular Scotland, are counting on a positive base effect from the fact that the elements of the scheme had been developed in close cooperation with the sector concerned, and same originated in the sector, thus stimulating ownership and responsibility.
Among the conservation measures, the real time closures have received most attention. Since autumn 2007 the UK authorities have developed in close collaboration with the fishing industry a system of real time closures. These were trialled voluntarily in 2007 and have been incorporated into the kilowatt days scheme. They consisted of different triggering mechanisms in terms of encountered cod abundance, different area sizes, and different objectives, namely protecting spawning cod in winter/spring, and undersized cod from late spring to the end of the year. More than 15 real time closures have been decreed until September 2008, and were respected almost entirely. They were situated mostly to the East and West of the Shetlands.
Further compulsory measures concerned the gears. Participating Scottish vessels must respect a 'one net rule' so that they carry only one regulated gear mesh size per trip. English vessels are already subject to this rule as part of the existing cod recovery mechanism.
Scottish twin rig vessels using 80-99mm demersal gear must now use either 80mm x 4mm single twine with a 110mm square mesh panel (SMP) **or** 95mm x 5mm double twine with a 90mm SMP. Either SMP must be at least 3m in length and inserted no more than 15m from the cod line. Scottish single trawl vessels using 70-99mm demersal gear must, from 1 July, use **either** a 110mm SMP of not less than 3m and inserted no more than 15m from the cod line or one of the SMP options which may be available under the enhanced scheme. According to the Scottish government, the rationale for choosing an SMP of 110mm is that recent trials of 120mm SMPs and FRS predictive models, based on trials of SMPs of 80 to 100mm mesh suggested that an 80mm codend of 4mm single twine with a 110mm SMP would have at least as good whitefish selectivity as the existing 95mm codend of 5mm double twine, 100 open meshes, a lifting bag and a SMP of 90mm at 15-18m. The latter is predicted to have a whiting L50 of 27cm compared with minimum landing size of 27cm and a haddock L50 of 23cm compared with minimum landing size of 30cm. Further field trials will be carried out during 2008 to confirm the performance of the 110mm SMP.
Participating 70-90mm vessels from England had, from mid of 2008, to use either a second SMP of at least 90mm (and not less than 3 metres in length) closer to the mouth of the net (4.4metres-7.4 metres from the fishing circle), **or** increase the size of the existing square mesh panel from 90mm to at least 110mm. The rationale for choosing option 1 (second SMP), according to the British government, is based on the CEFAS paper "Recent work to improve the efficacy of square-mesh panels used in a North Sea *Nephrops norvegicus* directed fishery" (Fisheries Research 85 (2007) 335-341). Option 2, the choice of the 110mm SMP, has been introduced on the basis of the Scottish trials.
In the context of obligatory gear trials that form part of the scheme as well, the Scottish government is undertaking a series of measures. Among them, it is currently finalising trials on an improved cod Eliminator trawl, a gear version that builds on the Canadian Eliminator trawl and aims at reducing the impact of having megrims and monks escape together with the cod.
Finally, participating vessels must take part in supplementary observation programmes, in addition to existing Cefas and FRS discards surveys, as agreed with UK industry.

3. Impact evaluation sources envisaged by the UK
The biological and technical side of impact analysis as planned by the UK consists of the following elements of information provision:

- ✓ Scientific discard data: updated throughout the year (rather than only a retrospective end year summary);
- ✓ Cod catch data from independent observers;
- ✓ Cod catch data from vessels participating in enhanced conservation scheme;
- ✓ Provision of effort uptake throughout the year using STECF reporting formats;
- ✓ Real time tracking of effort deployed in the cod recovery zone with regulated gear;

- ✓ Real time tracking of effort and VMS for individual vessels and groups of vessels to assess utilisation of hours at sea;
- ✓ VMS tracks of fishing patterns to investigate extent of changed behaviour linked to real time closures and cod avoidance; and
- ✓ Predictions of the impact of new gears where selectivity parameters are known or can be modelled and observer information from boats using new gears to monitor effectiveness in implementation.

Terms of reference

The STECF is asked, concerning the cod stocks in the North Sea and to the West of Scotland,

- ✓ to evaluate the effectiveness of the cod avoidance measures undertaken by the UK, if possible by quantifying their contribution to any reduction from the level of discards that would have been expected if those measures had not been put into place.

3.3.5. Preparation of the 2009 Annual Economic Report

DG Mare focal person: Angel Calvo

Background

To improve the format and the workflow related to the Annual Economic Report and as discussed during the last plenary meeting, the Commission would like to receive comments from the STECF on information and data needed to answer the minimum requirements defined for the 2009 AER.

According to such comments, the Commission will have to modify consequently the call for data to be submitted to Member States with the aim to allow economists attending SGECA meetings to carry out all relevant analysis supporting the report writing process to be dealt by JRC economists and to be endorsed by the STECF.

Terms of Reference

The STECF is requested to

1-Discuss format, contents and analytical improvements for AER 2009 (basic projections, analysis, outlooks and trends).

2-Discuss approach, feasibility and data needs (call of data) for a regional analysis.

The minimum content of AER should be:

1. Chapters presenting the current economic performance of the Member States' fishing fleets; this shall include the provision of historical trends, outlooks and basic projections, and relevant information on the impacts of any management measures, as specified in the preparatory meeting.

2. Regional analyses of economic performance for the regions as defined in the DCF (e.g. Baltic Sea; North Sea, Atlantic, Mediterranean and Black Sea, Regions where fisheries are operated by Community vessels).

3. Examination of trends in fish prices and EU markets.

3.3.6. Evaluation of the Technical Report 2007 for UK

DG Mare focal person: Antonio Cervantes

Background

The **Technical Report 2007 for UK** was sent out of delay and could not be assessed during the SGRN 08-02 meeting.

Terms of Reference:

The STECF is requested to deliver its opinion on this report.

1. Evaluation of 2007 TR's. The advice should consider at least the measures taken by each MS, the appropriateness of the methods used and the results achieved as regards data collection and data uses. The aim is to deliver a critique scientific review of the situation by evaluating what MSs had proposed in their National Programmes for 2007 and what they have finally achieved. Evaluation of the achievements should consider the international obligations of the EU in regards to the Regional Fisheries Organizations, the transmission and the uses of the data and the quality aspects. ICES will provide tables on data flow to illustrate the discussion. (These tables have been provided to SGRN group and are available in DG MARE in case of need).

2. Pilot studies: State of play and missing reports

3.3.7. Black Sea stocks

DG Mare Focal person: Franco Biagi

Terms of Reference:

STECF is requested to provide an in year-review of the 2009 TAC for turbot at the latest by mid-April 2009.. For this purpose updated data and information will be provided by the Commission on the basis of due time delivery both by Bulgaria and Romania.

STECF is also requested to evaluate and quantify the recent and past distribution of the turbot stock in the Bulgarian and Romanian waters and to evaluate whether the trends of catches are consistent with such distribution.

STECF is requested to set up a calendar to provide advice, by July 2009 at latest, on the status and trends of the main exploited stocks in the Black Sea with the view to establish catch limitations and conservation technical measure for 2010.

STECF is requested to make best use of the data collected and analysis so far carried out to avoid the problems for advice encountered in 2008.

STECF work programme shall take into account that also non-EU scientists and non-EU fisheries data should contribute to the above two-stage exercise.

3.3.8. German surveys on discards and discard reduction concerning the North Sea beam trawl prawn fishery, the saithe fishery, and the North Sea 120mm mixed cod fishery

DG Mare focal person: Jan Lindemann

Background

Cod selectivity North Sea beam trawl Prawn fishery

In the context of the cod recovery plan, an extension of the effort regime towards smaller than 80mm mesh size beam trawls has been discussed. The German Ministry for Agriculture has asked the Sea Fishing Institute for a summary report on the impact on cod of the German prawn (*Crangon crangon*) fishery. The Institute has reported on long-term scientific monitoring of by-catches in this fishery, and in particular on the reduced impact on young following the introduction of sieve nets and torquettes.

Stopp discard project

With the Stopp Discard Project, the German Sea Fishery Institute intends to quantify the discards in selected fisheries, and evaluate the economic consequences of a general catch landing obligation. Results from this project should be used as a basis for discard reduction efforts at the European level. The initial phase of the project has been planned for January to December 2008. The Sea Fishery Institute has focused on the saithe fishery and on the North Sea 120mm trawl mixed cod fishery. With a continuation of the project, the Institute might enlarge the evaluation towards the mixed cod fishery producing larger discards, namely the 80-100mm trawls.

The discussion and opinion to be provided by the STECF should follow a presentation of the reports and projects by the representatives of the German Sea Fishery Institute..

Terms of Reference:

The STECF is asked to discuss and comment on

1) the German Sea Fishing Institute's summary report on cod selectivity of the North Sea prawn fishery (summary report vTI dated 13.10.2008), and

2) the German Sea Fishing Institute's short status report on the forthcoming "stopp discard"-project that focuses the saithe fishery and on the North Sea 120mm mixed cod fishery (both trawls) (status report vTI dated 17.10.2008).

3.3.9. Hake Gulf of Lions

STECF is requested to examine a request from the French authorities to extend the existing derogation for the margin of tolerance of 15% by weight for hake between 15 and 20 cm total length in the French Mediterranean bottom trawl fishery in the Gulf of Lions (GSA 7) beyond 1st January 2009. This request is supported by a technical paper "Plans de gestion in Méditerranée" (item 9. Annexes).

Background

The hake fishery in the Gulf of Lions is jointly exploited by French and Spanish bottom trawlers, French gillnetters and Spanish longliners, each fleet targeting a given size range.

Current hake annual landings (2007) are around 2100 tonnes and the number of vessels operating in the area is 229. Most of hake landings (70% in weight) and number of vessels (114) correspond to the French bottom trawl fleet. The most recent assessments undertaken by the STECF and the GFCM/SCSA/SG Demersals meeting in September 2008, indicates growth overfishing with risk of recruitment overexploitation (available at GFCM website: http:// www.gfcm.org).

From 1st June 2010 the diamond 40 mm mesh-size nets will be replaced by a square-meshed net of 40 mm at the cod-end or by a diamond meshed net of 50 mm (Council Regulation (EC) No 1967/2006). Available studies conducted in the Mediterranean on the selectivity of bottom trawl with 40 mm square meshes indicate that hake discards would decrease, and show a shift in the size distribution towards higher sizes. Nevertheless, the new mesh sizes if correctly deployed will still catch hake smaller than the legal minimum size (<20 cm TL).

3.3.10. Rebuilding Plan for Herring in the Celtic Sea and Division VIIj

STECF has been requested to review and make any appropriate comments on a document prepared by the Irish Marine Institute, regarding a rebuilding plan for Herring in the Celtic Sea and Division VIIj.

The plan was proposed by the Irish Celtic Sea Herring Management Advisory Committee. The Marine Institute conducted stochastic simulations in order to assess the effects of the proposed management measures.

Background

ICES and STECF have advised that no target fishery should proceed unless accompanied by a rebuilding plan. ICES considers that F has been high for many years, between 0.5 and 1.1. In 2004 and 2005, the stock was below Blim ; the current state of the stock is uncertain, but it is below Bpa and possibly Blim. The rates of F are much higher than F0.1 (=0.19).

The plan is proposed by the Irish Committee in response to the ICES and STECF advice. The overall objective is to substantially reduce F from the current high levels to a sustainable rate, F0.1 (=0.19). The plan also aims to rebuild the stock to a level that is at or above Bpa (44,000 t), and that has a low risk of being below Blim (26,000 t).

The plan is based on the Harvest Control Rules and also incorporates a closed area, already established in Irish legislation. It mainly includes the following:

1. For 2009, the TAC shall be reduced by 25% relative to the current year (2008).

2. In 2010 and subsequent years, the TAC shall be set equal to a fishing mortality of F0.1.

3. If, in the opinion of ICES and STECF, the catch should be reduced to the lowest possible level, the TAC for the following year will be reduced by 25%.

4. Division VIIaS will be closed to herring fishing for 2009, 2010 and 2011, but a small-scale sentinel fishery will be permitted in the closed area (with a maximum catch limitation of 8% of the Irish quota).

Simulation results

A stochastic medium term forecast was conducted by the Marine Institute to evaluate the behaviour of the stock under this rebuilding plan and to provide likely catch options for subsequent years. In addition, a forecast of a fishery closure was conducted as a control experiment. Initial population numbers, catch weights, stock weights, maturity and natural mortality were taken from the ICA base case assessment carried out by ICES (2008). The catch in 2008 and 2009 was based on the Irish quota, assuming full uptake. Four recruitment scenarios were considered, corresponding to average values in different recruitment regimes.

Based on the proposed rebuilding plan, the stock is projected to grow each year, under all recruitment regimes. In all cases, median SSB is projected to be above Bpa from 2009 onwards and the risk to being at or below Blim is estimated to be low, lower than 5%. Risk to being below Bpa is still high in 2009 (from 17 to 33 %, according to the considered recruitment regime) but, in case of medium or high recruitment, it decreases in the following years. Catches are projected to increase gradually upon implementation of the F0.1 strategy in 2010 onwards. Logically, simulations of a fishery closure display a more rapid increase in SSB to higher levels over the simulation period.

3.3.11. HCR in cod recovery plan in the Celtic Sea

STECF is requested to examine a request by French authorities on the possible change in the harvest control rule to be applied in the Cod Recovery plan (CR(EU) 423/2004), for the Celtic sea.

Background:
The harvest control rule (HCR) as it is in the CR (EU) 423/2004 can be summarized as follows:

a) if $SSB < B_{lim}$, then F should be reduced by 25%
b) if $B_{lim}<SSB<B_{pa}$, then F should be reduced by 15% or $F_{2-4}=0.4$
c) if $SSB > B_{pa}$, then F should be reduced by 10% or $F_{2-4}=0.4$

In any case, except a), the TAC variation from one year to the other should not be greater than 15%.

A Working Document (WD) “A simple attempt to evaluate the impact on the Celtic Sea Cod stock of the proposed recovery plan, and some possible alternative scenarios” was submitted to STECF by the French Authorities (item 9. Annexes). It presents the results of simulations of possible effects on the time needed to reach the F target total and cumulative catches of variations of the HCR

3.4. OTHER MATTERS

3.4.1. Promoting interdisciplinary work in STECF

4. INFORMATION FROM THE COMMISSION – ORGANISATIONAL MATTERS

4.1. RULES OF PROCEDURES, WORKPLAN, REPORTS

STECF rules of procedures and replacement of STECF members

DG MARE's focal point for the STECF P. Daniel pointed out that because of internal Commission procedures, DG MARE is unable to ensure rapid approval of the STECF rules of procedures. Similarly the legal framework for the replacement of retired STECF members also means that replacement of members will be subject to some delay. Steps are currently being taken to facilitate the early approval of the rules of procedure and the appointment of replacement STECF members.

European transparency initiative

P. Daniel also informed the STECF that according to the new European transparency initiative, lists of experts attending STECF working groups have to be published under a specific format and on a specific website before any working groups meetings are held. This new procedure may involve experts to sign additional documents and formal publication of their names. Nevertheless, DG MARE is taking steps to try to streamline the procedure currently undertaken by the STECF-secretariat and that required under the European transparency initiative.

Planning of STECF work program

P. Daniel explained the workflow and the framework to be adopted in establishing the STECF annual work plan and agenda. In relation to annual working plans, DG MARE intends to hold discussions with STECF, JRC, ICES and EFARO by beginning of October, with the aim to finalize the timetable for working groups and advice for institutions involved in the advisory process by beginning of December. The plans may have to be reviewed and revised following the December Fisheries Council. In relation to the STECF plenary and its working group meetings, DG MARE will aim to ensure that, as far as possible, the meeting agenda and all supporting documentation will be made available at least 15 calendar days before the meeting.

Referring to the 2009 workplan, P. Daniel informed the Committee of the outcome of the first meeting held in Brussels on 15.10.2008 between STECF, JRC, ICES, EFARO and DG MARE. This meeting discussed how best to share the workload between STECF and ICES to address the foreseen advice requirements of the Commission. In relation to data calls to be launched under the new data collection framework, DG MARE will discuss with JRC how to develop, maintain and update databases that contain routinely requested data from MSs. This discussion will take place in the context of renewal of an administrative arrangement to be signed before the end of 2008 by JRC and DG MARE.

The meeting also discussed the requirements for scientific expertise in relation to the future evaluation of recovery and management plans It was agreed during the meeting that a common

methodology should be discussed and agreed between ICES and STECF in an attempt to deliver consistent advices on such plans.

The next step will be to discuss an initial work schedule for 2009 linked to a timetable of STECF plenary and WG meetings. As highlighted by the EFARO representatives during the meeting, it is important to review the expert resource base, to ensure that the demands and expectations of the work program are likely to be met.

Annual Economic Report (AER)

In relation to the annual economic report, a new framework for its production is to be developed between DG MARE, JRC and STECF. It is the intention that JRC will build a dedicated database to hold those data supplied in response to data calls to MS. JRC economists will be involved in the analysis of such data and will be also produce a first draft report, which is to be reviewed by economists in SGECA. The final Annual Economic Report will be an STECF publication, to be published in the JRC series of scientific and technical reports. This new framework is under discussion in the context of the renewal of an administrative arrangement between DG MARE and JRC.

Publication of STECF reports

H. Dörner (JRC, STECF secretariat) informed the STECF, that DG MARE's legal Unit have indicate that JRC scientists should be considered expert participants in STECF. As such they are considered as scientific co-authors for STECF reports where JRC's role was more than a purely secretarial one. He also informed the Committee that DG MARE agreed that STECF reports will no longer be published in the format of Commission Staff Working Documents (containing SEC Numbers). In future, STECF reports will be published in the series of JRC, scientific and technical reports. This format will allow timely publication and allocation of ISBN numbers, which should help to increase the scientific visibility of the STECF, e.g. by reports being easier to cite. The new publication format will be applied to all STECF reports, which have not yet been allocated a SEC number.

4.2. CO-ORDINATION WITH ICES

Background

At the co-ordination meeting between representatives from STECF, ICES, EFARO and DG Mare held in Brussels on 15 October 2008 (see item 4.1), it was agreed that STECF and ICES should jointly explore how best to co-ordinate and co-operate in the development and evaluation of management and recovery plans.

Accordingly, Michael Sissenwine, Hans Lassen and Martin Pastoors from ICES attended the STECF November 2008 Plenum to present the ICES experiences with the development and evaluation of management and recovery plans and to discuss cooperation between STECF and ICES on these issues.

Discussion

The presentations given by Michael Sissenwine and Martin Pastoors and the following discussion clearly illustrated that it is not straightforward how to develop and evaluate management plans. A number of questions were tabled about the scope and nature of management plans, the role science and management play in the development and evaluation of the plans, and the involvement of stakeholders in the process.

Multi-annual recovery plans and management plans (collectively referred to as management plans) are an important element of the Common Fisheries Policy. While the increasing application of management plans is seen as a positive development, there are concerns about the ad hoc way the plans are been developed and evaluated.

To date, management plans have been developed for individual stocks or closely related stocks, with most of the attention on a harvest control rule for setting annual TACs and fishing effort levels. The development of the plans has in general not been coordinated and there are examples of plans involving the same fisheries, which are incompatible.

Several different processes have been used to develop management plans, such as:

- Fishery manager led development- Some plans have been developed internally within the European Commission or Regional Fisheries Commissions with limited involvement of stakeholders and scientist,

- Stakeholder lead development- In some cases, stakeholders under the auspice of a Regional Advisory Council, have developed plans with scientists strongly involved.

- Scientist lead development- There are also examples of the management plan development process being lead by scientists and cases where ICES has been requested by the EC to develop a management plan.

At present, the roles and responsibilities of scientists and scientific organizations in the development and evaluation of management plans (e.g., STECF and ICES), management authorities (e.g., EC), stakeholders and stakeholder organizations (i.e., RACs), and member states are not well understood.

Similarly, evaluation processes for management plans have been ad hoc. Some plans have been evaluated by ICES and other plans by STECF. There are inconsistencies in the methodologies used for evaluations between ICES and STECF, as well as within each of the organizations. In particular, the evaluations are not consistent with respect to:

- Methodology- The evaluations range from qualitative judgments to simple deterministic models to highly complex stochastic simulation models that are pioneering science. There are tradeoffs between applying simple models and complex models in terms of realism, practicality, and transparency. An important consideration is that the more complex the models are, the more difficult it is to use them interactively with managers and stakeholders during the plan development process. This means that in the process of developing a management plan it may be necessary to guess what will work and what will not, until after they have agreed on a proposed plan.

- Criteria- Regardless of the methodology, the acceptance or rejection of a management plan should be based on its expected performance relative to objectives and risk considerations. Objectives and risk criteria are rarely given in management plans with adequate specificity to be used for evaluation. Scientists are sometimes asked to evaluate plans relative to the precautionary approach, which is only partially specified for some situations, and unspecified for others. Thus, there are ad hoc judgments about evaluation criteria, which have lead to inconsistencies.

Some other aspects of management plans that merit consideration are:

- Management plan units- Currently, management plans are applied to individual stocks or a few closely related stocks. There does not seem to be a common understanding of how many plans are needed to cover the fisheries concerned or a priority for developing plans. Alternatively, plans could be developed for management units specified by fisheries or ecosystems.

- Scope of management plans- The most important element of current management plans are harvest control rules for setting TACs and fishing effort limits. Some plans also address control and compliance questions while technical measures most often are not integrated in the plans. Rarely do the plans address multispecies consideration, bycatch issues, ecosystem considerations such as habitat effects of fishing, or economic and social aspects of fisheries.

- Adaptive management- The performance of management plans should be monitored and evaluated. This should lead to an adaptive management approach where aspects of the plan that do not work are corrected, and new information that accumulates during the life of the plan is applied to improve the plan.

Two workshops are proposed to address these issues. The first workshop should be geared toward agreeing on a consistent framework for evaluation of existing management plans and proposals for new plans expected to be implemented in the near future. The key issues to be addresses in this workshop are scientific. Therefore it should be convened by scientific organizations, but it is critical that managers and other stakeholders be involved to clarify and sometimes specific evaluation criteria, including risk levels.

The second workshop should have a longer term perspective so that it can address management plan units, scope of management plans, and adaptive management, in the context of an ecosystem approach. It is recommended that this workshop should be convened by the European Commission since the workshop's primary focus should be on policy issues but participation by Stakeholders and scientists is vital.

Proposed Workshops:

1. Workshop on a consistent process for development and evaluation of current and proposed management plans-

Objective: Agree on a consistent framework for the evaluation of management plans to be applied to existing plans and during the process of developing addition plans, during the next year or so. The objective of this workshop is to address the backlog of existing plans and to assist with the development of plans in the short term.

Conveners: STECF and ICES with co-chairs

Participants: About 40 in total with scientists from ICES and STECF, managers from the EC and/or ICES member states (e.g., Norway, Russia), and stakeholders from RACs.

Venue: Copenhagen 28-30 January (following a planned meeting between ICES and RACs)

Terms of Reference:

1. Review existing frameworks on management plan development and evaluations
2. Propose (for adoption by STECF and ACOM) a practical methodology and criteria for consistent evaluation of existing management plans to be applied during 2009.
3. Describe implementation issues or confounding factors that are not usually modeled, but nevertheless should be addressed during management plan evaluation.
4. Propose roles and responsibilities for managers, stakeholders, and scientists for the development and evaluation of management plans over the next year or so.

2. Workshop on the evolution of management plans as comprehensive tool for an ecosystem approach to fisheries management-

Objective: To consider the potential to use management plans as a comprehensive tool for an ecosystem approach to fisheries management, and to identify concrete steps to be taken to advance this potential.

Convener: The European Commission with assistance from STECF and ICES.

Participation: Managers, policy people including politicians, stakeholders, scientists

Date and venue: TBD

Candidate Terms of Reference:

1. Consider the scope of a management plan.
2. Consider criteria to define management plan units.
    - See the work of the STECF working group on Research Needs
    - See reports of the ICES WG on Fisheries System
3. Consider the process of developing a management plan.
4. Consider an approach for monitoring and evaluating plan performance in the context of adaptive management.
5. Consider all of the above in terms of an ecosystem approach to fishery management.

STECF notes that the outcome of the proposed ICES/STECF workshops could be potentially useful in the development of tools and approaches for the development and evaluation of management plans for fisheries beyond the ICES area and which are the subject of different management regimes e.g. in the Mediterranean.

STECF therefore recommends that both workshops be attended by representatives from the range of scientific disciplines from within its membership.

5. ASSESSMENT OF WORKING GROUP REPORTS

5.1. Evaluation of the 2007's technical reports (DCR)

STECF is requested to review the report of the **SGRN-08-02** of June 30 – July 5, 2008 (Ispra) meeting, evaluate the findings and make any appropriate comments and recommendations.

Terms of reference

1. Evaluation of 2007 TR's

The advice should consider at least the measures taken by each MS, the appropriateness of the methods used and the results achieved as regards data collection and data uses. The aim is to deliver a critique scientific review of the situation by evaluating what MSs had proposed in their National Programmes for 2007 and what they have finally achieved. Evaluation of the achievements should consider the international obligations of the EU in regards to the Regional Fisheries Organizations, the transmission and the uses of the data and the quality aspects. ICES will provide tables on data flow to illustrate the discussion.

2. Pilot studies: State of play and missing reports;

3. BluefinTuna and Swordfish Tagging 2005-2007: Summary of actions undertaken by Member states and evaluation;

4. Evaluation of the situation regarding the response by MS to the call for economic data launched to produce the draft report on the "Economic Performance of EU Fishing Fleet: Annual Report 2008"

5. SGRN 08-01: Presentation of the main outputs of the meeting and establishment of sound scientific criteria for the evaluation of NP and TR (as recommended by SGRN 08-01).

STECF comments

The STECF comments below equally apply to the evaluation of the delayed UK Technical Report (TR) 2007, see item 6.6.

STECF endorses the **SGRN-08-02** report and supports the initiative regarding the implementation of a regional perspective for the evaluation of the Technical Reports. STECF agrees with the methodology used by SGRN, in particular the use of ICES data tables to complement the evaluation. STECF encourages the constitution of integrated regional databases gathering data from all DCR modules and not only statistics and biological information. As a first step, STECF recommends that the definition of the data exchange format is included as an agenda item for the next STECF plenary and that the format is in line with the specifications of the new DCR. Experts from the data user side should be invited for that agenda item. STECF supports the request of SGRN for the workshop on the quality of economic data (now postponed to the first quarter of 2009) to address the question of the representativeness of sampling for economic data.

STECF notes that not all Member States have fulfilled their obligations under the provisions of Council Regulation 1543/2000 (DCR) and its subsequent amendments and that in some cases the shortfalls in data provision are compromising the ability of the STECF to give appropriate management advice. STECF understands that some Member States are not allocating the necessary funds to carry out the sampling called for under the DCR until the matched financial contribution from the Commission has been received. STECF therefore urges the Commission to remind

Member States of their obligations under the DCR to ensure that the required data are collected in a timely fashion irrespective of the timing of funding from the EU.

Concerning the specific issue related to the tagging programme on large pelagic species, which was extensively analysed for the period 2005-2007, STECF shares the SGRN-08-02 conclusion that the tagging activities for bluefin tuna and swordfish carried out within the DCR framework in these years had only partly achieved the targets.

Besides the tagging achievements, it was important to understand how and if the data were used in stock assessments and SGRN-08-02 noted that no comprehensive summary of the results from the tagging programme was included in the reports of the Planning Group on Tuna Tagging (PGTT) in 2007. Concerning the ICCAT use of tagging data, there is an ongoing effort to include these data into the bluefin tuna stock assessment, particularly in the two-box VPA approach, which runs a tuned VPA for each stock area including exchange rate parameters, to account for migratory and mixing effects. The last PGTT report (20-22 October 2008) was received by STECF during the plenary in draft format. This report includes more information, maps and analysis than any other previous report. Previous STECF remarks on tuna tagging programmes have been addressed in the 2008 PGTT report. .

STECF notes that tagging activities are excluded from the DCR from 2009 onwards. In principle, according to the 2008 PGTT report, the results from tagging programmes have the potential to provide valuable information for stock assessment and could be eligible for inclusion in the DCR programme. However, STECF is of the opinion that their value for stock assessment purposes should be clearly supported by results as a prerequisite to such programmes being considered for inclusion in the DCR, otherwise STECF considers that such studies should be funded by other means.

STECF, sharing the opinion of SGRN-08-02, recommends that Member States and the Commission pay particular attention to all issues related to large pelagic species because of large discrepancies in data reported to Regional Fisheries Management Organisations (RFMOs) and in the DCR National Programme (NP) proposals, and particularly for the fishing activities carried out in distant waters. Granted derogations should be properly documented.

STECF is very much concerned with the need to maintain the quality of the evaluation process for future NP proposals and TRs in the light of the increasing number of Member States, the introduction of new modules in the DCR and the need to support a more integrated approach to fisheries management (biological, economic and ecosystem) at the regional level.

STECF recommends improving the timing of the evaluation process and supports the move towards a regional perspective. For the NP evaluation, it suggests that prior to NP submission, Regional Co-ordination Meetings (RCMs) should agree coordinated data collection methodologies at regional level where appropriate. The NP evaluation should then refer to the RCM reports and recommendations. The TR evaluation should be preceded by an analysis of the data collected at regional level, based on regional integrated databases. This preliminary task should be conducted in close collaboration between JRC and SGRN.

5.2. Assessment of fishing effort regimes

STECF is requested to review the report of the **SGRST-08-03** of September 1-5, 2008 (Lysekil) meeting, evaluate the findings and make any appropriate comments and recommendations.

The working group was requested for:

1 – an assessment of fishing effort deployed by fisheries and métiers which are currently affected by fishing effort management schemes defined in Annex II to Regulation (EC) No 40/2008;

2 – an assessment of fishing effort deployed by fisheries and metiers, which will be affected by the extension of the cod recovery plan to the Celtic Sea.

Terms of Reference:

1. To provide historical series, as far back in time as possible, according to each of the following fishing areas:

Areas covered by Annex IIA

h. Kattegat (ICES functional unit IIIaS),
i. (i) Skagerrak (ICES functional Unit IIIaN), (ii) North Sea (EC waters of ICES sub-area II and ICES sub-area IV), (iii) Eastern channel (ICES division VIId)
j. West of Scotland (ICES division VIa)
k. Irish Sea (ICES division VIIa)

Areas covered by Annex IIB

l. Atlantic waters of the Iberian Peninsula (ICES divisions VIIIc and IXa, excluding the Gulf of Cadiz)

Areas covered by Annex IIC

m. Western Channel (ICES division VIIe)

New areas related to the assessment request

n. Celtic Sea (total of ICES divisions VIIb, VIIc, VIIe, VIIf, VIIg, VIIh, VIIj and VIIk and total for the subset of ICES divisions VIIf and VIIg)

The data should also be broken down by

- ✓ Member State ;
- ✓ regulated gear type and by associated special conditions defined in Annex II as far as relevant ;
- ✓ unregulated gear types catching
  - o cod in fishing areas a, b(i), b(ii), b(iii), c, d and g;
  - o sole in fishing areas b(i), b(ii), b(iii) and f;
  - o plaice in fishing areas b(i), b(ii) and b(iii),
  - o hake and Norway lobster in fishing area e

for the following parameters:

a. Fishing effort, measured in kW.days and in GT.days and in number of vessels concerned

b. Catches (landings and discards provided separately) of
- ✓ cod, sole and plaice in areas covered by Annex IIA,
- ✓ hake and Norway lobster in areas covered by Annex IIB,
- ✓ sole in areas covered by Annex IIC,
- ✓ cod in the Celtic Sea,

by weight and by numbers at age.

c. Catches (landings and discards provided separately) of
- ✓ non-cod , non-sole and non-plaice in areas covered by Annex IIA,
- ✓ non-hake and non-Norway lobster in areas covered by Annex IIB,
- ✓ non-sole in areas covered by Annex IIC,
- ✓ non-cod in the Celtic sea catches (landings and discards)

by species, by weight and by numbers at age

d. Catch per unit effort (cpue) of
- ✓ cod, sole and plaice in areas covered by Annex IIA,
- ✓ hake and Norway lobster in areas covered by Annex IIB,
- ✓ sole in areas covered by Annex IIC,
- ✓ cod in the Celtic Sea.

2. Based on the information compiled under point (1) above, to rank gear types, with and without associated special conditions, on the basis of their contribution to catches expressed both in weight and in number of
- ✓ cod, sole and plaice in areas covered by Annex IIA,
- ✓ hake and Norway lobster in areas covered by Annex IIB,
- ✓ sole in areas covered by Annex IIC,
- ✓ cod in the Celtic Sea.

3. If relevant data are available, to comment on the quality of estimations on total catches and discards.

4. To assess the fishing effort and catches (landings and discards) of
- ✓ cod, sole and plaice in areas covered by Annex IIA,
- ✓ hake and Norway lobster in areas covered by Annex IIB,
- ✓ sole in areas covered by Annex IIC,
- ✓ cod in the Celtic sea

and associated species corresponding to vessels of length overall smaller than 10 metres in each fishery, by gear (corresponding to regulated and unregulated gear as defined in Annex II framework) and by Member State according to sampling plans implemented to estimate these parameters.

5. To describe the spatial distribution of the fishing effort deployed both in the Celtic Sea and in the context of Annexes IIA, IIB and IIC to Regulation (EC) No 41/20007, according to data reported in logbooks on the basis of ICES statistical rectangles, with the aim to determine to what extent fishing effort has moved from long distance to coastal areas since the implementation of the days-at-sea regime for the first time in 2003 (Annex XVII to Regulation (EC) No 2341/2002).

6. Based on information compiled under point (1), on assessments done under point (2), (3), (4) and (5) and on the definition of métier adopted on level 6 of the matrix developed by the STECF-SGRN and STECF-SGECA Working Groups, to highlight métiers
- ✓ that are affected by rules defined in fishing effort regimes defined in Annex II for each of the areas a, b(i), b(ii), b(iii), c, d, e and f or

- ✓ that would be affected by a possible extension of the fishing effort (Annexe IIA) related to the cod recovery plan to the Celtic Sea.

In both cases and for each métier which will have been identified, it is requested to specify economic data which are already available or which should be requested to Member States to allow assessment of any change in fishing effort management schemes related to Annex II.

During this process, it is requested that that STECF-SGRST Working Group attempt

- ✓ to classify combinations of grouping of fishing gears and special conditions, as currently define in Annex II, according to the typology suggested by the STECF-SGRN.
- ✓ to notice
  - o when aggregations of combinations may be suggested (e.g. when such combinations cover a similar métier)
  - o when separation of combinations may be suggested (e.g. when such combinations cover two different métiers, or more).

STECF comments and conclusions

- STECF endorses the report of SGRST-08-03 and its findings and conclusions.
- STECF-SGRST has during its two meetings updated fleet specific effort and catch (including discard estimates where available) data up to 2007 and provides in this report, results based on an aggregation, which is consistent with the fleet/gear categories defined in Annexes IIA, IIB and IIC to Council Reg. 40/2008. This year data were received from more countries including Spain and preliminary discard rates from France.
- STECF considers that good progress was made by SGRST this year in collating data and preparing advice on the Celtic Sea.
- STECF considers that the overall effect has been an improvement in data quantity and detail provided on a wider range of metrics.
- STECF notes that the assignment of effort and catches according to derogations is based on best expert knowledge, data availability and methods used, and also reflects cooperation with the national control and enforcement institutions. In view of the extensive databases created, some data inconsistencies may still exist.
- STECF notes that discard data are still incomplete from some member states and areas. STECF therefore recommends that care is exercised in the use of metrics in the report that involve catch data.
- STECF is unable to comment on the quality of the fleet specific estimates of total catches and discards, mainly due to lack of requested data quality parameters, i.e. numbers of discard samples, fish measured and aged.
- Detailed information on unregulated gears (gears not covered by Annexes IIA, IIB and IIC) was provided by SGRST for the first time. STECF notes that data queries concerning these gears were complex and suggests that if these data are to be used for management purposes in the near future, consultation with the SGRST chair and JRC database support is advised.
- STECF considers that it would be advantageous if closer alignment could be achieved between future effort management regime gear categories and the requirements and rationale of the new Data Collection Regulation. Some progress was made in examining the relationship between metiers and the effort categories as defined in Annexes IIA, B and C of

Council Regulation 40/2008 (particularly in the Irish Sea and West of Scotland) and further work is needed.

- STECF supports the view that more permanent future support and maintenance of the STECF database is necessary. Given the repeated experience of late and inconsistent data reports received from Member States, STECF recommends that the task of European fleet-specific data compilations of effort and catch be better institutionalised and conducted on a routine basis. STECF welcomes the Commission's intent to provide support through JRC. STECF also recommends that the Commission take steps to discuss and agree the future arrangements for access to the database.

5.3. Mediterranean – Evaluation of the SGMED achievements and related advices

STECF is requested to review the work accomplished by SGMED in 2008, with particular attention to the report of the SGMED-08-04 of October 6-10, 2008 (Ponza) meeting, evaluate the findings and make any appropriate comments and recommendations with the view also to steer SGMED towards the goals of the framework mandate for STECF as given at the SGMED 08-01 of 14 March 2008.

STECF is, in particular, requested to:

a) assess the status and trends of the stocks of **sardine** (*Sardina pilchardus*) by all relevant GSAs, or, if the case, by bigger areas merging adjacent GSAs, in the Mediterranean Sea and provide short term, medium term and long term forecasts of stock biomass and yield under different management options, by fisheries if possible. Advise on the status of the exploited stocks with respect to high yields harvesting strategies and to maintain their reproductive capacity and ensure a low risk of stock collapse.

b) assess the status and trends of the stocks of **anchovy** (*Engraulis encrasicolus*) by all relevant GSAs or, if the case, by bigger areas merging adjacent GSAs, in the Mediterranean Sea and provide short term, medium term and long term forecasts of stock biomass and yield under different management options, by fisheries if possible. Advise on the status of the exploited stocks with respect to high yields harvesting strategies and to maintain their reproductive capacity and ensure a low risk of stock collapse.

c) assess the status and trends of the stocks of **hake** (*Merluccius merluccius*) by all relevant GSAs or, if the case, by bigger areas merging adjacent GSAs, in the Mediterranean Sea and provide the status together with short term, medium term and long term forecasts of stock biomass and yield under different management options, by fisheries if possible. Advise on the status of the exploited stocks with respect to high yields harvesting strategies and to maintain their reproductive capacity and ensure a low risk of stock collapse.

d) assess the status and trends of the stocks of **red mullet** (*Mullus barbatus*) by all relevant GSAs or, if the case, by bigger areas merging adjacent GSAs, in the Mediterranean Sea and provide the status together with short term, medium term and long term forecasts of stock biomass and yield under different management options by fisheries if possible. Advise on the status of the exploited stocks with respect to high yields harvesting strategies and to maintain their reproductive capacity and ensure a low risk of stock collapse.

e) assess the status and trends of the stocks of deep-sea rose shrimp (*Parapenaeus longirostris*) by all relevant GSAs or, if the case, by bigger areas merging adjacent GSAs, in the Mediterranean Sea and provide the status together with short term, medium term and long term forecasts of stock biomass and yield under different management options by fisheries if possible. Advise on the status of the exploited stocks with respect to high yields harvesting strategies and to maintain their reproductive capacity and ensure a low risk of stock collapse.

f) assess historic and recent trends (capacity, technological creep, nominal fishing effort) in the major fisheries by GSAs or, if the case, by bigger areas merging adjacent GSAs exploiting the stocks assessed. The trends should be interpreted in light of management regulations applicable to them.

g) review and propose biological reference points related to high yields and low risk of stock collapse in long term of each of the stocks assessed. Set up stock-size dependent harvesting strategies and slope-based approaches decision control rules to avoid risk situations for the stocks while ensuring higher fisheries productivity

h) identify any needs for management measures required to safeguard the stocks assessed.

i) review the applicability and fully document all applied methodologies for the assessments, projections and determination of the proposed biological reference points.

j) fully document the data used and their origin for the assessments, projections and determination of the proposed biological reference points.

k) review social and economic reference points. Advice on possible short-term economic consequences of the selected long-term harvesting strategies. Evaluate whether the proposed long-term harvesting strategies are compatible with long-term economic profitability (MEY) of the main fisheries exploiting the assessed stocks.

l) provide and review population and community indicators.

m) propose a detailed SGMED working plan for 2009 including data, meetings and facilities needed regarding methodology standardization and continuation of the assessments of small pelagic and demersal stocks in the Mediterranean Sea and of the provision of scientific advice for the fisheries exploiting such resources. In particular, such plan should consider availability of recent survey data to provide short term projections. The timing should also allow EU scientists to deliver a higher number of stocks assessments into the GFCM-SAC advisory mechanism as well as, if the case, to prepare the basic data and analysis for possible joint assessments therein.

n) suggest adjustments and provide guidance on data needs and quality, on methods and on interpretations so that SGMED work can further progress in 2009 towards the goals of the overall mandate given to STECF focusing its attention, in particular, on the various stocks of the following species: European hake, red mullet, blue whiting, common Pandora, red sea bream, axillary seabream, common sole, horse mackerel, greater forkbeard, poor-cod, sargo breams, picarels, bogue, Sea bass, Anglerfishes, gilthead sea bream, tub gurnard, mackerel, common dolphinfish, sardine, anchovy, sprat, deepwater rose shrimp, Norway lobster, red-shrimp, blue-and-red shrimp, Atlantic bonito, stripe-bellied bonito, bullet tuna.

Background

The European Community is expecting 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.

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 and trends of the main demersal and small pelagic stocks and evaluate the exploitation levels with respect to their biological and economic production potentials and the sustainability of the stock.

An overall framework mandate has been given to STECF (SGMED 08-01, 10-14 March 2008).

Use of 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 through

studies and research projects funded either at national and/or Community levels in the last 25 years was requested.

STECF comments and recommendations

1. STECF acknowledges the extensive number of assessments (43) performed and/or finalised following analyses conducted during SGMED meetings in 2008 and presented in the report of SGMED-08-04. In addition, for the first time, summary sheets including management advice for 25 stocks of European hake, red mullet, deepwater pink shrimp, anchovy and sardine were provided. Some inconsistencies between different stocks in the estimation and definition of several biological parameters were noted by the Working Group. To resolve that incongruence, STECF recommends that a specific workshop in the beginning of 2009 should be held with the aim to:

i. To derive and agree on appropriate values for M and growth parameters for stocks of demersal and small pelagic species.;

ii. To explore alternative stock units and to investigate the possibility of combining stock-specific data from adjacent GSAs based on ecological, biological and fishery features.;

iii. To standardise the MEDITS and GRUND surveys time series to account for unbalanced sampling design and appropriate data distribution. Specific work has been initiated to allow for estimation of standardized MEDITS and GRUND surveys.

iv. To define a DCF call for biological and economic data to support the work of SGMED in 2009.

v. To define Terms of Reference for two subsequent assessment working groups proposed for 2009 (see below).

2. STECF agrees with the SGMED recommendation that to support the GFCM, assessments for stocks in the Mediterranean be continued in 2009 within two meetings; the first meeting to focus on the estimation of historic and recent stock parameters should b held in June 2009 and the second on predictions of catch and biomass under different management scenarios in short and medium term should be held in October ahead of the STECF winter plenary meeting. The second meeting should also aim to and derive reference points for economic sustainability and provide economic advice of the various management scenarios simulated.

3. STECF notes that for several stocks, F reference points were estimated for the first time. Thus, for those stocks where estimates of current F were available, stock status was evaluated against the proposed reference points. Despite the fact that the F estimated reference points represent a first attempt to define potential targets and limits, STECF agrees that they represent the best estimates currently available and can therefore be used as basis for evaluating the status of the exploitation.

4. STECF notes that for most of the stocks assessed (80%), current exploitation rates are higher or much higher than any level of fishing mortality that is associated with long term sustainable targets and should be reduced. The stocks concerned are listed in the SGMED summary sheets and the STECF Review of advice for 2009.

5. STECF notes that the time series used by the SGMED are often shorter than 10 years. A lack of trend in stock biomass in the short term does not automatically imply that the stock is not overexploited. Thus, STECF recommended that efforts should be made to collate historical

information on biological descriptors of the stock or standardized CPUE from surveys or other sources that can be compared with current CPUE estimates.

6. STECF recommends that multi-annual plans for the management of demersal and pelagic fisheries in the Mediterranean be established. The development of such plans needs to consider catches of other species in a mixed fishery context and should be socio-economically evaluated.

7. STECF concludes that overall the SGMED framework has so far represented an excellent forum to support stock assessment and advice within the region and built the foundations upon which assessment work can be successfully undertaken. It has also allowed the standardisation of procedures for data collection and analysis within the region. In order to ensure further develop the work, the STECF suggests that inter-sessional workshops or training courses be pursued to expand the number of scientists fully able to undertake assessments within the Mediterranean region including scientists from non-EU Member States.

5.4. Review of scientific advice on stocks of Community interest – part 2

STECF is requested to review the report of the SGECA-SGRST-08-03 of October 20-24, 2008 (Fuengirola) meeting, evaluate the findings and make any appropriate comments and recommendations.
In accordance with Article 3 of Commission Decision 629/2005 of 26 August 2005 establishing a Scientific, Technical and Economic Committee for fisheries, STECF is requested to:

- Review the advice from ICES for 2009-2010 and make any appropriate comments or recommendations for the following stocks:
    - Hake in ICES division IIIa, ICES suabreas IV, VI & VII, ICES division VIIIa, VIIIb, VIIId
    - Northeast Atlantic mackerel
    - Western horse mackerel (*Trachurus trachurus*) in ICES divisions IIa, IVa, Vb, VIa, VIIa-c, VIIe-k
    - Blue whiting in ICES subareas I-IX, XII & XIV
    - Norwegian spring spawning herring

- Review the most recent advice for stocks of interest to the EU from the following regions:
    - Stocks in the area of CECAF
    - Stocks in the area of WECAF
    - Stocks under the jurisdiction of CCAMLR
    - Stocks under the jurisdiction of GFCM (consistency or incongruities with SGMED achievements and advices shall be highlighted).
    - Stocks under the jurisdiction of ICCAT
    - Stocks under the jurisdiction of IOTC
    - Stocks under the jurisdiction of IATTIC
    - Stocks under the jurisdiction of ICCAT
    - Stocks in the Southeast Atlantic
    - Stocks in the Southwest Atlantic

In addition STECF is requested to provide a Description of environmental issues and fishery re sources status of the EEZ outermost regions

Background

In the context of the formal requirement, STECF has to draw up an annual report on the status of Community fisheries including biological, economic and social aspects. Although in practice this review is more concentrated on stocks under the TAC regime, it is also convenient, for monitoring purposes, to include all Community fisheries independently from their legal status within the CFP. However, stocks around outermost regions (OR's) have not been assessed systematically by this committee and the last assessments known are for prawn and red snappers of French Guyana in 2003.

Terms of reference

For fishery resources of the EEZ around outermost regions (Azores, Madeira, Canaries, French Guyana, Martinique, Guadeloupe and La Réunion), STECF is requested:

1) to describe the main fisheries exploited either by local fleets or by foreign fleets within the EEZ. The description should cover fish stock status, fishing fleets, fishing techniques and economic and social performance of these fisheries.

- A description of fisheries exploiting local, resident stocks around the Azores, Madeira and the Canary Islands. Where possible, provide an assessment of stock status and an evaluation of the economic situation of the fleet exploiting such stocks.

- A description of fisheries exploiting local, resident stocks around Réunion Island. Where possible, provide an assessment of stock status and an evaluation of the economic situation of the fleet exploiting such stocks.

- A description of fisheries exploiting local, resident stocks around French Guyana, Martinique and Guadeloupe. Where possible, provide an assessment of stock status and an evaluation of the economic situation of the fleet exploiting such stocks.

- In the case un Guyana, describe and assess separately:
  - Coastal fisheries exploiting white fish (poissons blancs)
  - Coastal fisheries (including foreign vessels) exploiting red fish (poissons rouges, especially red snapper) and sharks
  - Fisheries exploiting *Penaeus* shrimps

2) to describe the main environmental issues related to these fisheries: by-catch of sensitive species, effects of fisheries on natural habitats and influence of the environmental quality of the water on fisheries performance.

STECF response

STECF reviewed and adopted the report of the SGECA-SGRST-08-03 of October 20-24, 2008 (Fuengirola) meeting. This report was combined with the STECF report reviewing the advice for stocks in the ICES area prepared by the SGRST 08-02 meeting held in Helsinki from 30 June – 4 July 2008 and adopted by STECF at it Summer plenary meeting in July 2008. The resulting report represents the definitive STECF review of advice for 2009 for stocks of community interest.

This review presents summary information on the assessment and advice for stocks worldwide that are of interest to the EU. The information in the review supersedes that which was prepared in Part 1 of the Review of Advice for 2009.

For each stock, a summary of the following information is provided:

STOCK: [Species name, scientific name], [management area]
FISHERIES: fleets prosecuting the stock, management body in charge, economic importance in relation to other fisheries, historical development of the fishery, potential of the stock in relation to reference points or historical catches, current catch (EU fleets' total), any other pertinent information.
SOURCE OF MANAGEMENT ADVICE: reference to the management advisory body.
MANAGEMENT AGREEMENT: where these exist.
PRECAUTIONARY REFERENCE POINTS: where these have been proposed.
STOCK STATUS: Reference points, current stock status in relation to these. STECF has included precautionary reference point wherever these are available.
RELEVANT MANAGEMENT ADVICE: summary of advice.
STECF COMMENTS: Any comments STECF thinks worthy of mention, including errors, omissions or disagreement with assessments or advice.

The STECF review of scientific advice was drafted by the STECF Sub-group on Resource Status (SGRST, Chair, J. Casey) during its meetings in Helsinki, Finland from 30 June – 4 July 2008 and in Fuengirola, Spain from 20-20 October 2008 and subsequently finalised and endorsed at the 29th STECF Plenary meeting (5-9 November 2007).

6. ADDITIONAL REQUESTS SUBMITTED TO THE STECF PLENARY BY THE COMMISSION

6.1. Evaluation of cod catches in Baltic Sea subdivisions 27 & 28

Background

Article 29 of Council Regulation (EC) No 1098/2007 of 18 September 2007 establishing a multi-annual plan for the cod stocks in the Baltic Sea and the fisheries exploiting those stocks, requires the Commission to decide on an annual basis about the application of the fishing effort management limits defined in Article 8 of the same regulation in Subdivisions 27, 28.1 and 28.2.

Terms of References

The Commission requests STECF to advise if catches of cod in the period 1 October 2007 to 30 September 2008 in Subdivisions 27 and 28.2 were lower than 3% of the total catches in Subdivisions 25 to 28 and if the catches in Subdivision 28.1 were higher than 1.5 % of the total catches in Subdivisions 25 to 28.

STECF response

STECF was unable to address this request since the data required was not submitted by the relevant member States. The request will be analysed and provided by the STECF by written procedure by end November 2008.

6.2. Baltic fishing effort system/ possible derogation for flatfish fishery

Background

Article 8 of Council Regulation (EC) No 1098/2007 establishing a multi-annual plan for the cod stocks in the Baltic Sea and the fisheries exploiting those stocks is establishing a fishing effort system for fishing vessels fishing with trawls, Danish seines or similar gear of a mesh size equal to or larger than 90 mm, with gillnets, entangling nets or trammel nets of a mesh size equal to or larger than 90 mm, with bottom set lines, longlines except drifting lines, handlines and jigging equipment.

The system consists of closed periods and days absent from ports, which are set on an annual basis according to the rules defined in Article 1. In order to allow small-scale fishing with a low impact on cod (low cod catches and/or targeting for other species such as flatfish), vessels below 12m can use up to 5 days absent form port per month during the closed periods.

The BS RAC has taken the position that the effort scheme for the management of the cod fishery has limiting effects on other fisheries and suggested to the Commission to evaluate the derogation for small-scale vessels with regards to the flatfish fishery with 140-220mm and to exclude vessels using nets with mesh size above 220mm from the effort limitations.

Terms of References

In light of the requests from the BS RAC to the Commission, the Commission requests STECF:

1) To analyse for vessel groups 8-12m and 12-24m vessel length and the different gear categories defined in the Baltic cod plan (subdividing gillnets by mesh size groups 90-140mm/140-220mm/>220mm) by Member State the catch composition with these gears taking account of seasonal and regional differences and

2) To advice on a potential exclusion of fishing vessels using nets with mesh size above 220mm from the effort limitations in light of the objectives and targets defined in the management plan for Baltic cod.

STECF response

STECF was unable to address this request during the plenary meeting since the data required were not submitted by the relevant member States. The requests will be analysed by the STECF by written procedure and advice will be provided in a separate report. If data submission will take place shortly after the plenary meeting STECF aims to provide its advice in December 2008.

6.3. STECF opinion on the Commission's summary annual report on Member States' efforts during 2006 to achieve a sustainable balance between fishing capacity and fishing opportunities

Background

In accordance with Article 14 of Council Regulation (EC) No 2371/2002 and Article 12 of Commission Regulation (EC) No 1438/2003, the Member States and the European Commission have the following obligations:

1) Each Member State shall submit its annual report on its efforts during the year 2007 to achieve a sustainable balance between fishing capacity and fishing opportunities to the Commission by 30 April 2008.

2) The Commission, on the basis of the data in the Community Fleet Register and information contained in the Member States' annual reports, shall prepare a summary annual report and present

it to the Scientific, Technical and Economic Committee for Fisheries and to the Committee for Fisheries and Aquaculture before 31 July 2008.

3) These two above-mentioned Committees shall transmit their opinion back to the Commission no later than 31 October 2008.

4) The Commission's summary with the Member States' reports attached, accompanied by the opinions of the above mentioned two Committees, shall be sent to the European Parliament and the Council before 31 December 2008.

Terms of reference

The STECF is requested to review the Commission's summary annual report on Member States efforts during 2007 to achieve a sustainable balance between fishing capacity and fishing opportunities, evaluate the findings and make any appropriate comments and recommendations. Particular attention should be paid to Member States which have implemented the 'Guidelines for an improved analysis of the balance between fishing capacity and fishing opportunities' produced by and ad-hoc working group of the STECF.

STECF comments and recommendations

STECF is pleased to note that at least eight MS have applied some or all of the new guidelines on evaluating the balance of fleet capacity and fishing opportunities. It is regrettable that two major fishing MS did not submit any annual report. It is hoped that with more notice available to national correspondents, more MS will be able to include the balance indicators in their annual reports for 2008. STECF will be able to evaluate the usefulness of the indicators when applied more broadly in practice.

However, the Commission's summary report still focuses very much on reports of in-year capacity changes, rather than on the balance between capacity and opportunity. **STECF recommends** that in addition to comments in the Commission summary, the complete set of balance indicators be included in the annex tables for each MS.

STECF recommends that new guidelines for MS are prepared giving more detailed instructions about the calculation of the balance indicators. Some MS have attempted to apply the balance indicators but appear to have misunderstood the requirements. There should be a list of required sections, more detailed explanations of how to calculate and complete tables, how to apply the traffic lights, and a request to draw conclusions about the balance question, rather than just produce the indicator tables and traffic lights.

Evaluation of the findings contained in the summary report
The summary report finds that overall, fleet capacity has been reduced but there is no attempt to say whether, for the EU, the balance between fleet capacity and fishing opportunity has improved, worsened or remained the same.

The lack of any comment from most MS on their own national balance indicators of course makes it a difficult job to create any overview for the whole of the EU.

MS which included balance indicators

In addition to reviewing the Commission's summary, STECF members reviewed the eight MS reports which included some balance indicators.

General observations on the quality of the summaries:

- The summaries in the Commission report failed to capture a lot of significant detail within the original reports and do not tend to include any interpretations or comments on tables provided which are not expressly stated in the MS report.
- In cases where the MS report does not draw conclusions or give a national overview, the Commission could potentially make a more useful summary by including an overview opinion based on the balance indicators provided.
- Because of the lack of detail in some of the Commission's summaries of MS reports, STECF cannot effectively evaluate the findings of the summary report.
- Although it is not a legal requirement to include the balance indicators in annual reports, STECF urges the Commission to encourage MS to calculate and present these indicators and draw conclusions from them about their overall balance between capacity and opportunity. This would enable the Commission to make an overall assessment of the EU fleet and its balance with EU opportunity.

Comments about Commission summaries of specific MS reports

Comments on the summary of the Belgium report
The summary of the Belgian report referred to capacity reduction and included an assessment on balance between capacity and opportunity, along with a comment about likelihood of scrapping in the next six-year period. The summary of this report includes the key points contained in the original report.

Comments on the summary of the Bulgaria report
The summary misses the point that the balance indicators were only calculated on 18 vessels out of the fleet of 2,500 vessels. The summary fails to pick up from the MS report that they have a problem in completing the balance indicators due to the seasonal nature of their fisheries and therefore the low number of days per year that the vessels are at sea.

Comments on the summary of the Denmark report
The Commission's summary report mixes up conclusions from different calculations within the Danish report. There are contradictory statements within the summary. The summary does not make clear the conclusions on balance made in the Danish report.

It is not clear from the summary whether or not the Danish report included the proposed balance indicators.

STECF finds the Danish approach both interesting and useful in the search for an assessment of balance between capacity and quotas (stocks) and suggests that the Commission in cooperation with the MS should widen this approach to all MS.

Comments on the summary of the Italy report
The summary of the Italian report is a good reflection of the contents of the Italian report.

Comments on the summary of Lithuania report

The summary of the Lithuanian report includes only one piece of detail, relating to reduction in fleet capacity, but misses a great deal of information which relates to balance of fleet capacity and fishing opportunity. Although the MS report itself did not draw overall conclusions, there is enough information contained in the tables in the Lithuanian report to conclude that there is still substantial over capacity in their national fleet.

The summary of the Lithuanian report states that no conclusions are drawn in relation to the size of the fleet – but it is the balance of fleet size to fishing opportunity on which conclusions should be drawn, not simply on fleet size.

Comments on the summary of the Malta report
The summary states that the Maltese report uses the balance indicators proposed, but does not mention that only two of the indicators are reported. No economic indicators are calculated.

The Commission's summary of the Maltese report states that capacity of the fleet is judged to be commensurate with the available resources, however STECF cannot find any such conclusion in the Maltese report.

Comments on the summary of the Netherlands report
The summary notes that the guidelines proposed by the Commission were applied, but STECF notes that only a few of the indicators were reported.

There is a section in the Dutch report that relates to the aquaculture fleet but this section is not included in the summary.

Otherwise, the summary captures many of the main points included in the Dutch report.

Comments on the summary of the Sweden report
The summary accurately reports the comprehensive way in which the Swedish report has presented the balance indicators. The main conclusions of the report are well summarised.

STECF notes that the Swedish report gives a good example of how MS annual reports could be completed.

6.4. First evaluation of the UK cod avoidance measures introduced in 2008

Background
1. Alternative effort scheme
The effort limits in days at sea have been reduced in the North Sea by 10% for trawlers >70mm, and to the West of Scotland by 11% (trawlers 70-90mm) and 18% (trawlers >100mm) respectively. Concerning these effort limits, it was agreed that Member States could refrain from eventual effort-cuts in exchange for active cod avoidance practice followed by fishermen, by applying an alternative effort management using baskets of kW-days. This agreement anticipated in particular a Scottish initiative planned for 2008, the Conservation Credit Scheme.
From February 2008, the UK has implemented such an alternative effort-management scheme, including the Conservation Credit Scheme. The scheme applies English, Northern Irish and Scottish trawlers and seiners in two effort groups, namely >70<90mm and >100mm mesh size. The areas covered are the North Sea and West of Scotland. The system was introduced with an "opt-out"

mechanism; that is it was assumed that all vessels participated, and that those not wishing to participate or not fulfilling the conditions to participate would be excluded as and when this became apparent.
Participating vessels have received an effort allocation that is unchanged with respect to 2007. The overall limitations in the effort groups as resulting from the limits in days at sea for 2008 must nevertheless be respected by the UK. This is possible because not all vessels within an effort group will make use of the allocation, and the UK can in addition draw on an important number of additional days that have been permanently assigned to certain UK fleet segments in recent years, and can do a mixed calculation.
So far, the UK has not requested additional days for 2008 going beyond the existing limitations. The implementation of the scheme will therefore, in terms of effort, respect the limits set in days at sea for the different types of vessels, and result in an effort deployment in 2008 that is limited by the 2007 allocation at national level. An evolution in effort deployment per gear and area might occur due lower uptake levels of effort overall, or because of a difference in the special deployment of the effort.

2. Purpose of the scheme at measures designed to serve this purpose
The declared purpose of the scheme is to reduce cod mortality and discards. The UK, and in particular Scotland, are counting on a positive base effect from the fact that the elements of the scheme had been developed in close cooperation with the sector concerned, and same originated in the sector, thus stimulating ownership and responsibility.
Among the conservation measures, the real time closures have received most attention. Since autumn 2007 the UK authorities have developed in close collaboration with the fishing industry a system of real time closures. These were trialled voluntarily in 2007 and have been incorporated into the kilowatt days scheme. They consisted of different triggering mechanisms in terms of encountered cod abundance, different area sizes, and different objectives, namely protecting spawning cod in winter/spring, and undersized cod from late spring to the end of the year. More than 15 real time closures have been decreed until September 2008, and were respected almost entirely. They were situated mostly to the East and West of the Shetlands.
Further compulsory measures concerned the gears. Participating Scottish vessels must respect a 'one net rule' so that they carry only one regulated gear mesh size per trip. English vessels are already subject to this rule as part of the existing cod recovery mechanism.
Scottish twin rig vessels using 80-99mm demersal gear must now use either 80mm x 4mm single twine with a 110mm square mesh panel (SMP) **or** 95mm x 5mm double twine with a 90mm SMP. Either SMP must be at least 3m in length and inserted no more than 15m from the cod line. Scottish single trawl vessels using 70-99mm demersal gear must, from 1 July, use **either** a 110mm SMP of not less than 3m and inserted no more than 15m from the cod line or one of the SMP options which may be available under the enhanced scheme. According to the Scottish government, the rationale for choosing an SMP of 110mm is that recent trials of 120mm SMPs and FRS predictive models, based on trials of SMPs of 80 to 100mm mesh suggested that an 80mm codend of 4mm single twine with a 110mm SMP would have at least as good whitefish selectivity as the existing 95mm codend of 5mm double twine, 100 open meshes, a lifting bag and a SMP of 90mm at 15-18m. The latter is predicted to have a whiting L50 of 27cm compared with minimum landing size of 27cm and a haddock L50 of 23cm compared with minimum landing size of 30cm. Further field trials will be carried out during 2008 to confirm the performance of the 110mm SMP.
Participating 70-90mm vessels from England had, from mid of 2008, to use either a second SMP of at least 90mm (and not less than 3 metres in length) closer to the mouth of the net (4.4metres-7.4 metres from the fishing circle), **or** increase the size of the existing square mesh panel from 90mm to at least 110mm. The rationale for choosing option 1 (second SMP), according to the British government, is based on the CEFAS paper "Recent work to improve the efficacy of square-mesh panels used in a North Sea *Nephrops norvegicus* directed fishery" (Fisheries Research 85 (2007)

335-341). Option 2, the choice of the 110mm SMP, has been introduced on the basis of the Scottish trials.
In the context of obligatory gear trials that form part of the scheme as well, the Scottish government is undertaking a series of measures. Among them, it is currently finalising trials on an improved cod Eliminator trawl, a gear version that builds on the Canadian Eliminator trawl and aims at reducing the impact of having megrims and monks escape together with the cod.
Finally, participating vessels must take part in supplementary observation programmes, in addition to existing Cefas and FRS discards surveys, as agreed with UK industry.

3. Impact evaluation sources envisaged by the UK
The biological and technical side of impact analysis as planned by the UK consists of the following elements of information provision:

- ✓ Scientific discard data: updated throughout the year (rather than only a retrospective end year summary);
- ✓ Cod catch data from independent observers;
- ✓ Cod catch data from vessels participating in enhanced conservation scheme;
- ✓ Provision of effort uptake throughout the year using STECF reporting formats;
- ✓ Real time tracking of effort deployed in the cod recovery zone with regulated gear;
- ✓ Real time tracking of effort and VMS for individual vessels and groups of vessels to assess utilisation of hours at sea;
- ✓ VMS tracks of fishing patterns to investigate extent of changed behaviour linked to real time closures and cod avoidance; and
- ✓ Predictions of the impact of new gears where selectivity parameters are known or can be modelled and observer information from boats using new gears to monitor effectiveness in implementation.

Terms of reference

The STECF is asked, concerning the cod stocks in the North Sea and to the West of Scotland,

- ✓ to evaluate the effectiveness of the cod avoidance measures undertaken by the UK, if possible by quantifying their contribution to any reduction from the level of discards that would have been expected if those measures had not been put into place.

STECF observations

Despite recent and systematic reductions in both cod TAC's and effort allocations to fleets having significant cod catches, the required reductions in fishing mortality on cod have not been realised, although F levels in many stocks have declined. Effort management remains central in the Commission's proposals for further reducing mortality. During the 2007 Council, agreement was reached for a provision allowing member states to manage their own effort (KWdays) within an agreed ceiling. The provision was subject to implementing a variety of cod avoidance measures and reporting on progress. UK Government (and particularly the Scottish Government) in close collaboration with stakeholders (fishing industry and NGO's), made use of this provision and developed and initiated the Conservation Credit Scheme (CCS). To date, 439 Scottish and ~30 English and Welsh vessels are participating in the programme.

The agreed KWdays ceiling allowed for the vessels to operate with the same effort levels as 2007. The basic scheme required vessels to engage in cod avoidance measures. The principle being that reductions in cod mortality could be achieved through measures other than further reductions in days. The utilisation of effort allocations are closely monitored (see item 9. Annexes).

The CCS has two central themes aimed at reducing the capture of cod through (i) avoiding areas with elevated abundances of cod through the use of Real Time Closures (RTCs) and (ii) the use of more species selective gears. Within the scheme, efforts are also being made to reduce discards generally. STECF acknowledges the potential benefit of these measures at reducing cod mortality attributed to the Scottish demersal trawl fisheries. STECF notes that it is too early to quantify what effect to date the CCS may have had on the cod mortality. Notwithstanding, STECF notes that some initial findings are presented in a series of documents provided by the Scottish Marine Directorate and FRS Marine Laboratory (See Appendix **) which indicate that these measures have resulted in reduced cod catches. The indications are that improved gear selectivity is likely to contribute to reductions in fishing mortality and discard levels, particularly of haddock and whiting.

Evidence of vessel behaviour and associated landings pre, during and post closure was presented to STECF for 12 closed areas. Detailed analysis of VMS and logbook data indicated that vessels moved away from the RTC areas in compliance and that their cod landings decreased during and after the initiation of these closed areas. Overall it is estimated that cod landings were reduced by approximately 60% for those vessels affected by all RTC'c. Data were not available to assess what impact these closures have had on discard levels of cod from the affected vessels. STECF notes that whilst the reductions in overall cod landings being achieved by the vessels associated with the initial closures is a positive sign, the number of closures and area covered is relatively small and the number of vessels involved is low. In order to achieve significant reductions in fishing mortality on cod, the RTC programme will need to generate substantially more closures particularly in areas of high cod catchability.

STECF concludes that the mandatory introduction of more selective gears into the *Nephrops* fishery as part of the CCS programme is likely to have a significant impact on discard levels of both haddock and whiting, but the data presented for the trials for square mesh panels in *Nephrops* trawls are not conclusive for cod. Discard data from the national monitoring programme provides evidence to suggest that these technical measures are having an impact in practice. For both the North Sea and West of Scotland, whiting and haddock discard rates by weight are now estimated to be around 20% for both species. This is well below the historic average. While some of this reduction in discard may be attributed to recent low recruitment, the further reductions in whiting discards in 2008 are against a backdrop of increased recruitment from the 2007 year class.

STECF notes that the trial of the cod selective trawl aimed at reducing the capture of cod across all ages showed promise and may offer an appropriate tool to reduce cod catches in fisheries targeting haddock and whiting. However, in order for these gears to offer a contribution to the reduction in cod mortality, these gears would have to be implemented into the commercial fishery.

STECF notes that despite the introduction of both RTCs and gear modifications, discard levels of cod in 2007 and 2008 are high and levels are substantially higher than in previous years. STECF notes that this increase in discarding is largely due to a mismatch between the agreed quota and the capacity of the fleet to catch cod. It is likely that the discarding situation may have been worse in the absence of the CCS and this is supported by an analysis presented by the Fisheries Research Services, Scotland (see item 9. Annexes). The main finding was that observed discards in quarter 1, 2008 were 8% lower than those predicted for the same period.

STECF Comments

STECF notes that at this time, it is not possible to quantify what reductions in mortality of cod or other species may have been achieved through the introduction of the CCS measures to date.

STECF notes that there is significant evidence that the exploitation patterns for haddock and whiting across all participating vessels have improved since the introduction of the CCS scheme.

STECF recognises the efforts made to develop gears that reduce the capture of cod and the early successful results. However, STECF notes that if such gears are to make a contribution to reducing cod mortality under the CCS, they would have to be implemented as a matter of urgency.

STECF notes that whilst the reductions in overall cod landings being achieved by the vessels associated with the initial closures is a positive sign, the number of closures and area covered is relatively small and the number of vessels involved is low. In order to achieve significant reductions in fishing mortality on cod, the RTC programme will need to generate substantially more closures particularly in areas of high cod catchability.

STECF notes that in order to ascertain what the impact on cod mortality of the actions of one member state are, it is necessary that stock assessments provide a breakdown of fishing mortality at a MS level (partial F).

6.5. Preparation of the 2009 Annual Economic Report

Background

To improve the format and the workflow related to the Annual Economic Report and as discussed during the last plenary meeting, the Commission would like to receive comments from the STECF on information and data needed to answer the minimum requirements defined for the 2009 AER.

According to such comments, the Commission will have to modify consequently the call for data to be submitted to Member States with the aim to allow economists attending SGECA meetings to carry out all relevant analysis supporting the report writing process to be dealt by JRC economists and to be endorsed by the STECF.

Terms of Reference

The STECF is requested to

1-Discuss format, contents and analytical improvements for AER 2009 (basic projections, analysis, outlooks and trends).

2-Discuss approach, feasibility and data needs (call of data) for a regional analysis.

The minimum content of AER should be:

4. Chapters presenting the current economic performance of the Member States' fishing fleets; this shall include the provision of historical trends, outlooks and basic projections, and relevant information on the impacts of any management measures, as specified in the preparatory meeting.

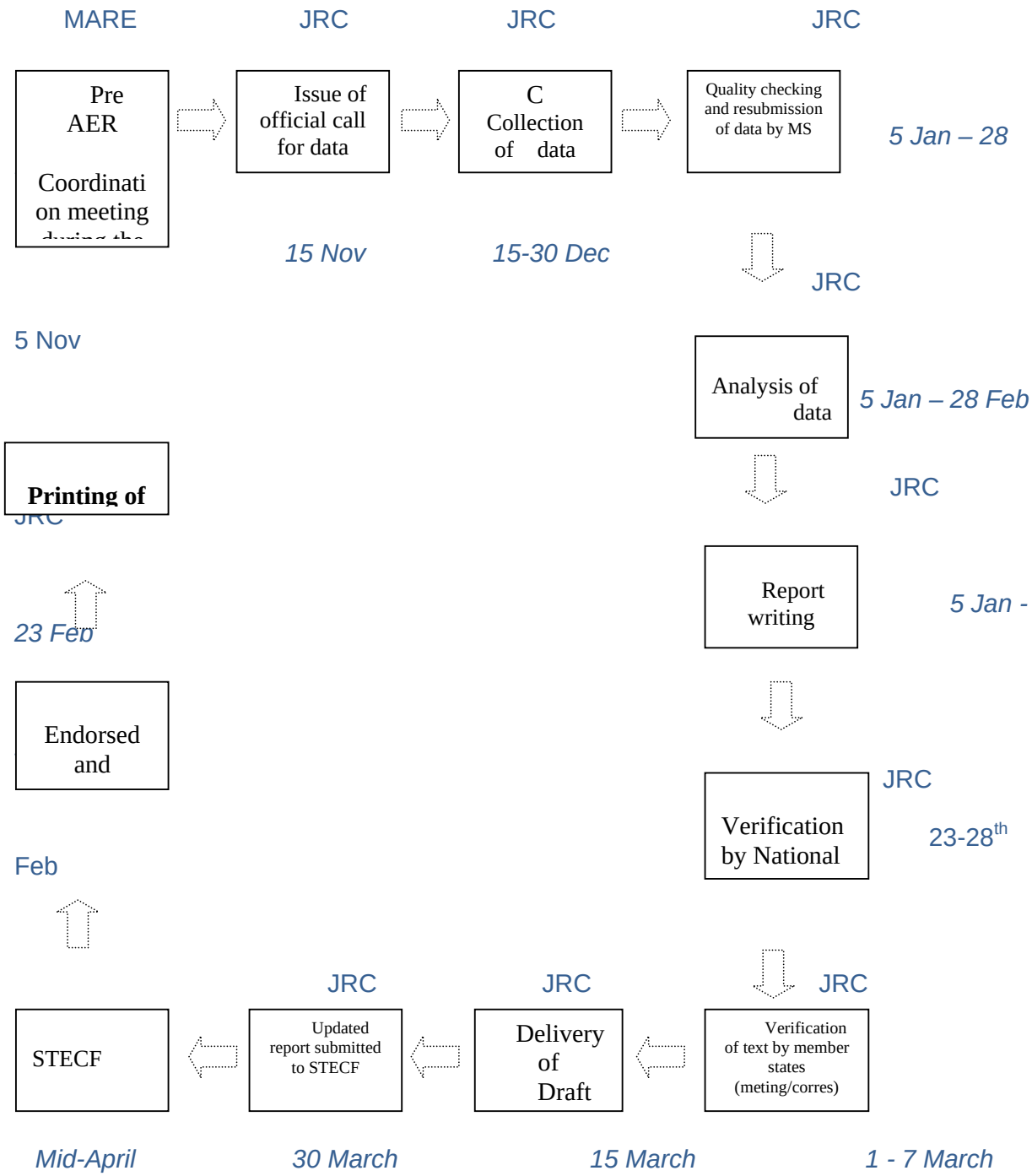
5. Regional analyses of economic performance for the regions as defined in the DCF (e.g. Baltic Sea; North Sea, Atlantic, Mediterranean and Black Sea, Regions where fisheries are operated by Community vessels).

6. Examination of trends in fish prices and EU markets.

In addition to this TOR, JRC presented the following document and requested for comments:

ANNUAL ECONOMIC REPORT (AER)

The below flow chart summaries the actions required for the production of the AER.



Call for data – Annual Economic Report

Data of the following parameters for 2002, 2003, 2004, 2005 2006 and 2007 should be provided.

Parameter		**Aggregation**
Capacity	Number of vessels, gross tonnage, engine power, average age	Yearly, fleet segment of appendix III
Landings	Weight and value	Quarterly, species, area (minimum level 2 of appendix I), fleet segment of appendix III
Effort	Days, kWdays, GTdays	Quaterly, area (minimum level 2 of appendix I), fleet segment of appendix III
Employment	Total, full-time, part-time, full-time equivalents	Yearly, fleet segment of appendix III
Revenue, costs and fuel consumption	Income, cost (crew, fuel, operational, capital, repair and maintenance, fixed), fuel (volume)	Yearly, fleet segment of appendix III
Financial position	Borrowing and investment	Yearly, fleet segment of appendix III
Price	Live weight	Yearly, species, fleet segment of appendix III

In order to make the regional analysis more feasible, could the MS also provide the Revenue, costs fuel consumption and employment parameters by area, whenever is possible.

STECF observations

STECF reviewed the contents of the 2008 AER, with respect to the tables, the projections, outlooks and trends. STECF observes that the format as it stands now is suitable as a basis for the 2009 AER. There may be scope for further improvement and this may be achieved through correspondence between JRC and STECF.

STECF observes that in the 2008 AER, the outlook regarding the economic situation of the segments was made qualitatively by experts during the meeting (INSERT REF). STECF recognises the need for projections given the fact that the report will only be completed nearly 1.5 years after the end of the reporting period. There are two options to provide these projections and outlooks:

1. Qualitative analyses
2. Quantitative analyses (e.g. based on models)

STECF considers qualitative analyses to be a minimum requirement, since an outlook is requested. However, STECF would also welcome any calculations that could give quantitative information on the current year economic performance in European fisheries.

STECF recognises that regional issues will become more important and therefore there is an increasing need for regional analyses. During the preparation of the 2008 AER, it was not possible to do the regional analysis. Two main reasons were:

- Uncertainty on the geographic coverage of the regions, especially for the Skagerrak and Kattegat area.
- Treatment of data relating to fleet segments that were active in more than one region.

In cases where a fleet segment is operating in two regions, it might be that fishing units fish exclusively in one regions or in some cases, single fishing units might be fishing in two regions (sometimes even within one trip). Because of the current aggregation of data by fleet segment it is not possible to allocate economic parameters to different regions.

During the AER meeting the WG identified some possible options to undertake regional analyses:

1. Allocate the entire fleet of each member state to one region
2. Make some large regions, e.g. Med. and Atlantic
3. Only include fleets that are fishing in one region (in essence, exclude from the analysis all vessels/fleets which fish in more than one region)
4. Include fleets fishing in several regions in each of the relevant regional analyses
5. Allocate fleet segments to areas based on expert knowledge
6. Split up the economics of fleets based on information on effort and landings value per region

STECF does not consider the first two options to be relevant from an analytical perspective.

The third and fourth options seem to have more merit. These will give the possibility for some interesting economic comparisons, for instance between the Polish trawler fleet 18-24m fishing solely in the Baltic Sea and a corresponding Danish fleet fishing both in the Baltic Sea and the North Sea. However, these options make aggregations on the level of the region and from regions to total EU-level impossible, because in these options fleets operating in more than one region will be either excluded or included in more than one table. Moreover, the third option will lead to the exclusion of several important fleet segments.

The fifth option could solve the problem of aggregation to the EU level, but STECF recognises that this can lead to misleading regional evaluations without the recognition that these are partly based on economic activity in other regions.

The sixth option might reduce the problem of bias, but STECF stresses that this option assumes that the cost structure per unit of effort is the same for all regions, and currently there is no information to test this hypothesis. The fact that even within one trip fishing units might be active in more than one region further complicates this issue. Moreover, although effort information should be available for all segments and regions, using suitable effort indicators to split up costs could be difficult for some fishing methods, such as static gears. This problem will remain in the next DCR where economic information will only be available on the supra region. STECF stresses that this option would require considerable resources and the development of appropriate methodologies.

Thus, although STECF recognises the need to make regional analyses, it stresses that such analyses must be based on a clear approach and assumptions, because the outcome may be used in a policy context.

Moreover STECF observes that the current DCR does not ensure complete coverage of the fishing activities in all regions for the economic data and this could induce bias in the regional estimates.

In addition to the terms of reference, STECF also evaluated the time line for the preparation of the AER provided by JRC. STECF observes that the planning of the process is now much better organised in accordance with the recommendations of the 2008 summer plenary and that this planning is a good basis for a successful procedure. STECF observes that to improve efficiency, JRC will prepare the tables and draft text for the report before SGECA becomes involved. Experts at SGECA could then analyse the trends and current situation and put this in a national context, evaluating significance and further implications, for example. In order to optimise attendance at the SGECA meeting, the meeting should be scheduled and promoted as early as possible.

The current time line aims to deliver a draft report in time for the April STECF plenary. STECF observes that the schedule is tight and that there is little room for delays. STECF stresses that the quality and completeness of the report should prevail over the timing.

STECF also observes that the call for data is planned for the 15th November 2008, for data submission by 15th December 2008, even though a number of MS probably will only have complete data for 2007 after the end of 2008. This early call could lead to a situation where MS do not deliver complete data by 15th December 2008, and a second data call would have to be made for submission of data in January 2009 in order to complete the data. STECF therefore requests that DG MARE confirm that MS can deliver the relevant data by 15 December 2008. If this cannot be achieved, then the schedule and timing will need to be revised.

STECF conclusions and recommendations

On the contents of the AER, STECF recommends that:

In the proposed SGECA working group meeting in spring 2009, projections and outlooks on the national chapters should, at the very least, be carried out qualitatively by experts during the meeting. Furthermore, STECF requests that JRC explore the possibilities for making quantitative calculations in order to enhance the quality of the projections. STECF suggests taking account of the approaches in economic performance reports carried out under the Concerted Action project.

It should be clearly stated in the AER that the regional analyses should only be used for comparison of the economic performance of fishing fleets operating in the same area. If so, the option of including all fishing fleets that are operating in the region can be used. Alternatively the regional analyses could be simplified to consider only effort, landings and prices although such an analysis would be much less informative.

In order to further improve the quality of the regional analyses in the future (after 2009), STECF recommends convening an STECF working group to look into the possibilities for splitting economic data according to region. This could be combined with the work on the relationship between fleet segments and metiers currently undertaken in the SGRST effort management Working Group.

STECF proposes that an extra chapter should be included in each year's report on a specific topic, for example, trends in employment and changes in catch composition.

STECF proposes that, in order to assess the quality of the data, an annex documenting the coverage of the data (from the technical reports) should be appended to the 2009 AER.

With respect to the process, STECF recommends that:

DG MARE should confirm that MS can deliver the relevant data by 15 December 2008.

The tasks of JRC and SGECA in writing the report should be more clearly specified. STECF proposes the following division of responsibilities:

- JRC compiles the tables and describes the data, both for the national chapters and the regional analyses.
- SGECA provides the analyses for the national chapters and the regional analyses.

There is a need to decide whether quantitative calculations can be undertaken in advance of the proposed SGECA meeting and whether this task should be undertaken by SGECA participants, JRC or through a contract.

National correspondents should be consulted on which fleet segments should be regarded as segments of special interest, in order to limit the number of segments for which descriptions need to be made.

6.6. Evaluation of the Technical Report 2007 for UK

Background

The **Technical Report 2007 for UK** was sent out of delay and could not be assessed during the SGRN 08-02 meeting.

Terms of Reference:

The STECF is requested to deliver its opinion on this report.

1. Evaluation of 2007 TR's. The advice should consider at least the measures taken by each MS, the appropriateness of the methods used and the results achieved as regards data collection and data uses. The aim is to deliver a critique scientific review of the situation by evaluating what MSs had proposed in their National Programmes for 2007 and what they have finally achieved. Evaluation of the achievements should consider the international obligations of the EU in regards to the Regional Fisheries Organizations, the transmission and the uses of the data and the quality aspects. ICES will provide tables on data flow to illustrate the discussion. (These tables have been provided to SGRN group and are available in DG MARE in case of need).

2. Pilot studies: State of play and missing reports

STECF comments

The STECF evaluation of the UK technical report for 2007 is given as an addendum to the report of the SGRN 08-02 meeting. Comments in item 3.2.1 of this report also include this evaluation.

6.7. Black Sea stocks

Terms of Reference:

STECF is requested to provide an in year-review of the 2009 TAC for turbot at the latest by mid-April 2009.. For this purpose updated data and information will be provided by the Commission on the basis of due time delivery both by Bulgaria and Romania.

STECF is also requested to evaluate and quantify the recent and past distribution of the turbot stock in the Bulgarian and Romanian waters and to evaluate whether the trends of catches are consistent with such distribution.

STECF is requested to set up a calendar to provide advice, by July 2009 at latest, on the status and trends of the main exploited stocks in the Black Sea with the view to establish catch limitations and conservation technical measure for 2010.

STECF is requested to make best use of the data collected and analysis so far carried out to avoid the problems for advice encountered in 2008.

STECF work programme shall take into account that also non-EU scientists and non-EU fisheries data should contribute to the above two-stage exercise.

STECF response

STECF notes that the lack of scientific advice for 2009 regarding the stocks of sprat and turbot was due to uncertainties in the data available to the STECF Black Sea sub-group, which prevented representative stock assessments and predictions of catch and biomass be conducted.

STECF recommends two meeting of its subgroup on the stocks of sprat and turbot in the Black Sea be conducted in 2009, in order to cover the tasks defined by the Commission. Such meetings should in particular be attended by experts from relevant non-EU states.

The first meeting of the STECF SG Black Sea (SG Black Sea-09-01) should be held during the first quarter of 2009 with the following ToR:

- review and comment on the data quality compiled by SG Black Sea during its meeting in June 2008 (see Annexes to the report of SGMED-08-03).
- compile complete sets of national annual data on landings, discards, landings at age, discards at age, mean weight at age in the landings, mean weight at age in the discards, maturity ogives at age and natural mortality at age for sprat and turbot by area for the longest time series available up to and including 2007. The data should be compiled based on official databases and best expert knowledge.
- compile all fishery independent data (pelagic, demersal, hydro-acoustic surveys) for sprat and turbot, their juveniles, eggs or early life stages. In order to allow the use of such data to potentially calibrate virtual population analyses, the abundance, biomass and spawning stock biomass indices at age should be compiled for the longest time series available up to and including 2007.
- compile complete sets of annual fishing effort data (number of vessels, kW*days, fished hours) by nation, for fleets and gears (mesh size where applicable) that catch sprat and turbot, and area for the longest time series available up to and including 2007.
- assess trends in historic stock parameters for sprat and turbot for the longest time series available up to and including 2007 (fishing mortality at age) and up to and including 2008 (spawning stock biomass, stock biomass, recruits at age). Different assessment models should be applied as appropriate, including analyses of retrospective effects.

- propose and evaluate candidate limit and target reference points consistent with maximum sustainable yield for sprat and turbot in the Black Sea.
- predict spawning stock biomass, stock biomass, recruits and catches at age and in weight for sprat and turbot in 2009 and the beginning of 2010 under different management scenarios including the status quo fishing (mean F at age 2005-2007, rescaled to 2007) and with a TAC constraint for 2009. Specifically comment on the consequences of the agreed TACs in 2009 for the stock parameters listed above with regard to reference points consistent with maximum sustainable yield.
- prepare maps showing geographic density patterns in annual abundance indices derived from surveys aggregated for age groups selected by the fisheries and compare them with maps of geographical distribution patterns in annual landings and discards of sprat and turbot by fishing gear.
- report all results to the spring plenary of STECF in 2009.

The second meeting of the STECF SG Black Sea (SG Black Sea-09-02) should be held during the second quarter of 2009 with the following ToR:

- compile complete sets of national annual data on landings, discards, landings at age, discards at age, mean weight at age in the landings, mean weight at age in the discards, maturity ogives at age and natural mortality at age for sprat and turbot by area for the longest time series available up to and including 2008. The data should be compiled based on official data bases and best expert knowledge.
- compile all fishery independent data (pelagic, demersal, hydro-acoustic surveys) for sprat and turbot, their juveniles, eggs or early life stages. In order to allow the use of such data to potentially calibrate virtual population analyses, the abundance, biomass and spawning stock biomass indices at age should be compiled for the longest time series available up to and including 2008.
- compile complete sets of annual fishing effort data (number of vessels, kW*days, fished hours) by nation, for fleets and gears (mesh size where applicable) that catch sprat and turbot, and area for the longest time series available up to and including 2008.
- assess trends in historic stock parameters of sprat and turbot for the longest time series available up to and including 2008 (fishing mortality at age) and up to and including 2009 (spawning stock biomass, stock biomass, recruits at age). Different assessment models should be applied as appropriate, including analyses of retrospective effects.
- propose and evaluate candidate limit and target reference points consistent with maximum sustainable yield for sprat and turbot in the Black Sea.
- predict spawning stock biomass, stock biomass, recruits and catches at age and in weight for sprat and turbot in 2009, 2010 and the beginning of 2011 under different management scenarios including the status quo fishing (mean F at age 2006-2008, rescaled to 2008) and with a TAC constraint for 2009. Specifically comment on the consequences for the listed stock parameters with regard to reference points consistent with maximum sustainable yield.
- report all results to the summer plenary of STECF in 2009.

6.8. German surveys on discards and discard reduction concerning the North Sea beam trawl prawn fishery, the saithe fishery, and the North Sea 120mm mixed cod fishery

Background

Cod selectivity North Sea beam trawl Prawn fishery

In the context of the cod recovery plan, an extension of the effort regime towards smaller than 80mm mesh size beam trawls has been discussed. The German Ministry for Agriculture has asked the Sea Fishing Institute for a summary report on the impact on cod of the German prawn (*Crangon crangon*) fishery. The Institute has reported on long-term scientific monitoring of by-catches in this fishery, and in particular on the reduced impact on young following the introduction of sieve nets and torquettes.

Stopp discard project

With the Stopp Discard Project, the German Sea Fishery Institute intends to quantify the discards in selected fisheries, and evaluate the economic consequences of a general catch landing obligation. Results from this project should be used as a basis for discard reduction efforts at the European level. The initial phase of the project has been planned for January to December 2008. The Sea Fishery Institute has focused on the saithe fishery and on the North Sea 120mm trawl mixed cod fishery. With a continuation of the project, the Institute might enlarge the evaluation towards the mixed cod fishery producing larger discards, namely the 80-100mm trawls.

The discussion and opinion to be provided by the STECF should follow a presentation of the reports and projects by the representatives of the German Sea Fishery Institute..

Terms of Reference:

The STECF is asked to discuss and comment on

1) the German Sea Fishing Institute's summary report on cod selectivity of the North Sea prawn fishery (summary report vTI dated 13.10.2008), and

2) the German Sea Fishing Institute's short status report on the forthcoming "stopp discard"-project that focuses the saithe fishery and on the North Sea 120mm mixed cod fishery (both trawls) (status report vTI dated 17.10.2008).

STECF comments

1. Beam trawl fishery for *Crangon*

STECF notes that the results presented in the report on cod selectivity in the German North Sea *Crangon* fishery are not sufficiently detailed to quantify the impact of discards of young cod on the North Sea cod stock. STECF notes that the existing derogation to the use of sieve nets during the summer months corresponds with the period where by-catch of young cod is highest.

2. ‘Stopp Discard’ project

STECF notes that the 'Stopp Discard' project is currently taking place as a pilot study to demonstrate the practical implications of a discard ban in two specific fisheries. Both fisheries use mesh sizes equal to or larger than 120 mm, the first one with less than 5% by weight each of cod, plaice and sole (saithe fishery) and the second one with more than 5% by weight of cod (mixed demersal fishery) in the North Sea. Both fisheries are characterized by low discards rates for all species caught. Given the low discard rates observed in both fisheries (less than 5%), STECF

expects the socio-economic implications of a discard ban to be insignificant. STECF notes the voluntary participation of part the German fishing/fish processing industry in this project.

STECF recommends investigating fisheries with a much higher discard rate and which are likely to result in significant socio-economic implications. STECF was informed that other MS (e.g. Denmark and Poland) conduct similar pilot projects on discard reduction and improved fisheries surveillance. STECF notes the importance to continue investigations of the consequences of changes in the effort system (kW-days instead of days-at-sea) or the introduction/increase of bycatch quotas in mixed fisheries to avoid discarding of valuable fish.

6.9. Hake Gulf of Lions

Terms of reference

STECF is requested to examine a request from the French authorities to extend the existing derogation for the margin of tolerance of 15% by weight for hake between 15 and 20 cm total length in the French Mediterranean bottom trawl fishery in the Gulf of Lions (GSA 7) beyond 1st January 2009. This request is supportedby a technical paper "Plans de gestion in Méditerranée" (ANNEX *)

Background

The hake fishery in the Gulf of Lions is jointly exploited by French and Spanish bottom trawlers, French gillnetters and Spanish longliners, each fleet targeting a given size range.

Current hake annual landings (2007) are around 2100 tonnes and the number of vessels operating in the area is 229. Most of hake landings (70% in weight) and number of vessels (114) correspond to the French bottom trawl fleet. The most recent assessments undertaken by the STECF and the GFCM/SCSA/SG Demersals meeting in September 2008, indicates growth overfishing with risk of recruitment overexploitation (available at GFCM website: http:// www.gfcm.org).

From 1st June 2010 the diamond 40 mm mesh-size nets will be replaced by a square-meshed net of 40 mm at the cod-end or by a diamond meshed net of 50 mm (Council Regulation (EC) No 1967/2006). Available studies conducted in the Mediterranean on the selectivity of bottom trawl with 40 mm square meshes indicate that hake discards would decrease, and show a shift in the size distribution towards higher sizes. Nevertheless, the new mesh sizes if correctly deployed will still catch hake smaller than the legal minimum size (<20 cm TL).

STECF Observations

The most recent assessments of hake in the Mediterranean indicate that growth overfishing of hake in the Gulf of Lions (and in other areas) is taking place and that there is a risk of recruitment overfishing. Protection of small hake or a reduction in the exploitation rate is therefore required to achieve higher yields and low risk to the stock. STECF notes that hake in the Gulf of Lions are jointly exploited by French and Spanish fleets and the bottom

trawl landings of both countries include a large number of individuals of hake <20 cm in length. In addition the same range of length classes of hake are caught by all other EU (and even non EU) bottom trawlers carrying out similar fishing activities in many parts of the Mediterranean. In the Gulf of Lions juvenile hake are distributed in relatively discrete dense concentrations, which are targeted by French and Spanish vessels. STECF notes that it should be possible to reduce the fishing pressure on juveniles by avoiding such dense concentrations but there is little incentive to do so because of the high market value of small hake.

STECF notes that the increase in mesh size for bottom trawlers from 40 mm diamond mesh to 40 mm square or 50 mm diamond from July 2010 has the potential to result in increases in yield per recruit for hake

STECF Conclusions

Given the above concerns, STECF is of the opinion that permitting a level of tolerance for the retention of a proportion of hake less than the minimum size is likely to encourage the continued targeting of small hake which will impair potential improvement in exploitation pattern.

Furthermore, STECF advises that in order to afford further protection for juvenile hake, additional measures be implemented to reduce the exploitation rate of hake below the minimum legal size. There is also a need to afford additional protection to larger size classes of hake. Such measures could include spatial and temporal closures of areas where juvenile hake are known to occur in dense concentrations. The benefit to the hake stock will be further enhanced if such closures apply to all gears capable of catching hake below the minimum size (20 cm).

All these concerns should be taken into account in developing the management plan for the bottom trawl fishery in GSA 7.

Note

A management plan proposed by the French authorities, including the "Hake Gulf of Lions" request dealt with in this section, will be analysed by the STECF by written procedure in November 2008. STECF will provide its advice in a separate report in early December 2008.

6.10. Rebuilding Plan for Herring in the Celtic Sea and Division VIIj

STECF has been requested to review and make any appropriate comments on a document prepared by the Irish Marine Institute, regarding a rebuilding plan for Herring in the Celtic Sea and Division VIIj.

The plan was proposed by the Irish Celtic Sea Herring Management Advisory Committee. The Marine Institute conducted stochastic simulations in order to assess the effects of the proposed management measures.

Background

ICES and STECF have advised that no target fishery should proceed unless accompanied by a rebuilding plan. ICES considers that F has been high for many years, between 0.5 and 1.1. In 2004 and 2005, the stock was below Blim ; the current state of the stock is uncertain, but it is below Bpa and possibly Blim. The rates of F are much higher than F0.1 (=0.19).

The plan is proposed by the Irish Committee in response to the ICES and STECF advice. The overall objective is to substantially reduce F from the current high levels to a sustainable rate, F0.1 (=0.19). The plan also aims to rebuild the stock to a level that is at or above Bpa (44,000 t), and that has a low risk of being below Blim (26,000 t).

The plan is based on the Harvest Control Rules and also incorporates a closed area, already established in Irish legislation. It mainly includes the following:

1. For 2009, the TAC shall be reduced by 25% relative to the current year (2008).

2. In 2010 and subsequent years, the TAC shall be set equal to a fishing mortality of F0.1.

3. If, in the opinion of ICES and STECF, the catch should be reduced to the lowest possible level, the TAC for the following year will be reduced by 25%.

4. Division VIIaS will be closed to herring fishing for 2009, 2010 and 2011, but a small-scale sentinel fishery will be permitted in the closed area (with a maximum catch limitation of 8% of the Irish quota).

Simulation results

A stochastic medium term forecast was conducted by the Marine Institute to evaluate the behaviour of the stock under this rebuilding plan and to provide likely catch options for subsequent years. In addition, a forecast of a fishery closure was conducted as a control experiment. Initial population numbers, catch weights, stock weights, maturity and natural mortality were taken from the ICA base case assessment carried out by ICES (2008). The catch in 2008 and 2009 was based on the Irish quota, assuming full uptake. Four recruitment scenarios were considered, corresponding to average values in different recruitment regimes.

Based on the proposed rebuilding plan, the stock is projected to grow each year, under all recruitment regimes. In all cases, median SSB is projected to be above Bpa from 2009 onwards and the risk to being at or below Blim is estimated to be low, lower than 5%. Risk to being below Bpa is still high in 2009 (from 17 to 33 %, according to the considered recruitment regime) but, in case of medium or high recruitment, it decreases in the following years. Catches are projected to increase gradually upon implementation of the F0.1 strategy in 2010 onwards. Logically, simulations of a fishery closure display a more rapid increase in SSB to higher levels over the simulation period.

STECF comments

STECF notes that the simulations carried out by the Marine Institute indicate that fishing at the proposed target fishing mortality of F0.1 is sustainable and that the proposed rebuilding plan if fully implemented and enforced is likely to result in a rebuilding of the Celtic Sea and Division VIIj herring stock to levels above Bpa.

STECF recommends that developments in the stock and fishery in response to the management plan are closely monitored.

6.11. HCR in cod recovery plan in the Celtic SeaGulf of Lions

STECF is requested to examine a request by French authorities on the possible change in the harvest control rule to be applied in the Cod Recovery plan (CR(EU) 423/2004), for the Celtic sea.

Background:
The harvest control rule (HCR) as it is in the CR (EU) 423/2004 can be summarized as follows:

d) if $SSB < B_{lim}$, then F should be reduced by 25%
e) if $B_{lim}<SSB<B_{pa}$, then F should be reduced by 15% or $F_{2-4}=0.4$
f) if $SSB > B_{pa}$, then F should be reduced by 10% or $F_{2-4}=0.4$

In any case, except a), the TAC variation from one year to the other should not be greater than 15%.

A Working Document (WD) "A simple attempt to evaluate the impact on the Celtic Sea Cod stock of the proposed recovery plan, and some possible alternative scenarios" was submitted to STECF by the French Authorities (see item 9. Annexes). It presents the results of simulations of possible effects on the time needed to reach the F target total and cumulative catches of variations of the HCR

There are two alternative scenarios evaluated in the WD:

Alternative 1

a) if $SSB < B_{lim}$, then F should be reduced by 15%
b) if $B_{lim}<SSB<B_{pa}$, then F should be reduced by 10% or $F_{2-4}=0.4$
c) if $SSB > B_{pa}$, then F should be reduced by 5% or $F_{2-4}=0.4$

Alternative 2

a) if $SSB < B_{lim}$, then F should be reduced by 10%
b) if $B_{lim}<SSB<B_{pa}$, then F should be reduced by 5% or $F_{2-4}=0.4$
c) if $SSB > B_{pa}$, then F should be reduced by 5% or $F_{2-4}=0.4$

In both cases considering that except a), the TAC variation from one year to the other should not be greater than 15%.

The simulations have been run under two possible assumptions for F.

- status quo F (Fsq = mean F 2005-2007). Which is the one considered by ICES
- F in accordance with a 'TAC constraint' the TAC set for VIIb-k could be split between area VIId, VIIe-k, and VIIbc, and that such a TAC is effective.

Results are presented in the following Table.

Table 6.11.1: Forecasting of the plan and the two alternatives for the period 2009-2020.

Réduction a) Réduction b) Réduction c)	Plan CR(EU) 423/2004 - -15% -10%		Alternative 1 - -10% -5%		Alternative 2 - -5% -5%	
2008	F_{sq}	F_{TAC}	F_{sq}	F_{TAC}	F_{sq}	F_{TAC}
2009	-15% TAC	-15%F	-10%F	-10%F	-5%F	-5%F
2010	-15%F	F=0.4	-10%F	-5%F	-5%F	-5%F
2011	-15%F	+15% TAC	-10%F	+15% TAC	-5%F	-5%F
2012	-10%	+15% TAC	-5%F	F=0.4	-5%F	-5%F
2013	F=0.4	+15% TAC	-5%F	F=0.4	-5%F	F=0.4
2014	F=0.4	+15% TAC	-5%F	F=0.4	-5%F	F=0.4
2015	F=0.4	F=0.4	-5%F	F=0.4	-5%F	F=0.4
2016	F=0.4	F=0.4	-5%F	F=0.4	-5%F	F=0.4
2017	F=0.4	F=0.4	F=0.4	F=0.4	-5%F	F=0.4
2018	F=0.4	F=0.4	F=0.4	F=0.4	-5%F	F=0.4
2019	F=0.4	F=0.4	F=0.4	F=0.4	-5%F	F=0.4
2020	F=0.4	F=0.4	F=0.4	F=0.4	F=0.4	F=0.4
Year* $B>B_{lim}$	2007	2007	2007	2007	2007	2007
Year* $B>B_{pa}$	2011	2009	2011	2009	2012	2009
Year* F <= cible	2013	2010	2017	2012	2020	2013
Number of years with reduction a)	0	0	0	0	0	0
Number of years with reduction b)	2	1	3	1	4	1
Number of years with reduction c)	1	0	5	1	7	3
Number of years with 15% TAC	1	4	0	1	0	0
Year of lowest landings	2010	2009	2010	2009	2010	2009
Lowest landings	3 815t	3 608t	4 024t	3 778t	4 264t	3 943t
Sum of landings 2009-2020	65 790t	70 131t	64 992t	69 917t	63 946t	69 784t

*Year= 31st December (=1st January next year)

Results indicate that there are differences in the year in which the F target (0.4) is obtained. The higher the reductions in F are, the quicker the target is reached, the quicker the increase in biomass is, the more often the +15% variation in TAC rule is applied, and the lower the cumulated landings (2009-2020) are.

STECF Comments

STECF notes that the assessment and simulations do not take into account discards of cod and in such circumstances the appropriate assumption for fishing mortality for 2008 (intermediate year) should be F_{sq}.

Following this assumption STECF notes that there are noticeable differences in terms of when the F target of 0.4 is expected to be achieved. Under the existing recovery plan the target F (F=0.4) is expected to be achieved by 2013, and by 2017 and 2020 for the two alternative harvest rules.

STECF further notes that the simulations presented are deterministic and therefore the level risk associated with each of the harvest rules cannot be evaluated. In order to provide more informed advice STECF recommends that in future, projections that include stochastic be undertaken and presented.

While the cumulative landings over the projection period are very similar, STECF notes that the distribution of landings over time varies according to the option for F reduction.

7. OTHER MATTERS

7.1. Promoting interdisciplinary working

STECF agreed to start a discussion on integrated interdisciplinary work at its spring plenary meeting in Hamburg. An input paper was presented at the winter plenary in Brussels. The discussion showed that it is necessary to distinguish between procedural problems and a lack of methods and tools necessary to address TORs which call for integrated work.

Background Observations

STECF notes that the group is organised very much along disciplinary lines. Reasons for that are quite obvious given the background of STECF members and the nature of the requests from the European Commission which are often based on very specific aspects of regulations, communications, white or green papers, etc. DG Fish was also organised along disciplinary lines with a lot of regulatory and legal work done by specialists in certain fields. Although, in the scientific world inter-disciplinary work is now increasingly common, it is still not everyday practice.
It was not until early 2006 that an economics unit was formed in DG Fish. This was a positive development, given that fishing is an economic activity. Interdisciplinary work within STECF may also improve because of the new organisation of DG Mare on a regional basis, rather than a disciplinary one, with regional departments responsible for legal, biological and management issues. Economics remains an additional unit covering all regions but requests from the Commission may be more along interdisciplinary lines than before because of these internal changes.
There is an increasing recognition and acceptance, within DG Mare and elsewhere, that fisheries management is an economic issue as well as a biological and technical one. Fishermen's choices to invest, to catch, to discard and to land fish are fundamentally business and economic decisions. The appropriate contribution of economics is therefore not simply to evaluate the likely impact of changes in, for example, TACs on profits and employment, but in the design and implementation of

the fisheries management systems. How fishing opportunities are defined and allocated amongst fleets is an economic question and also affects the economic incentives facing vessels and hence both economic and biological outcomes in the fishery.
STECF observes that increasing complexity of regulations may also affect the nature of STECF advice. Examples are long-term management plans for an increasing number of fisheries, the ecosystem approach to fisheries management and the new regulations on nature conservation issues.
In addition, EU regulations now require that economic and social impact assessments (IA) should be undertaken for all future policies. Comprehensive IAs are only possible with the cooperation of fisheries biologists, economists and sociologists, and in many cases with input from gear technology specialists. STECF's experience with IAs, such as the evaluation of the sole and plaice and the Northern hake long term management plans or discard reduction measures, shows that WGs face procedural, resource and methodological problems.
This may be also the case with regard to nature conservation issues and the implementation of the ecosystem based approach to fisheries management. STECF expects that complex regulations will be necessary for the designation of Natura 2000 sites and in the management plans for these sites (with the Irish Natura 2000 sites in the Irish Sea for cold water corals. STECF has already dealt with these issues). There is also an increasing public demand to reduce the negative impacts of fishing on ecosystems (non-target species, marine populations – whales, habitats etc.).

Procedural problems
Looking ahead, STECF expects to have to change some of its working procedures because of an increasing number of requests that are only answerable by more integrated work (involving biological, ecological, socio-economic and technical issues). There are three main problems here:
1) The lack of opportunity to undertake preparatory work before meetings.
2) The organisation of meetings.
3) The availability of enough experts to attend all the required meetings.

1) Experts attending meetings of STECF often complain that they were not able to undertake preparatory work, mainly because funding was not available. During the meetings, too much basic work has to be done and time for deeper analysis and discussion of results and conclusions is often lacking. This point was stressed in particular by STECF economists. It was mentioned during the November 2008 plenary meeting that it is intended that JRC will undertake more preparatory work with databases, data collection, etc. The Commission also suggested using the DCR framework to allocate a budget for preparatory work. These steps should go some way to easing the situation although are not expected to form a complete solution.
2) With regard to impact assessments, the experience within STECF is mixed. In the case of the flatfish management plan for the North Sea the experience was, apart from some data and modelling problems, quite positive. This seems to have arisen as a result of planning meetings between the working group chair, other experts and the Commission focal points, and voluntary preparatory work, especially with the EIAA model, which was used to calculate the economic consequences of certain measures. In this case, the biologists were able to deliver scenarios on the possible outcomes of different measures quite early during the meeting. This gave the economists the chance of discussing and calculating the economic consequences.
In the work on the hake long-term management plan preparatory work on data (metier-fleet based approach) was carried out before the meeting but the model proved to be deficient because of no feedback between economy and biology.
In the case of discard reduction measures the group were able to give some impression of the possible consequences of certain management measures. However, the economists needed 3½ days to establish baseline data for 2008 using 2006 data for a limited number of fleet segments (because of data restrictions). At the end of the fourth day the first scenario was provided to the economists and there was very little time remaining to calculate the possible impacts on the fleets.

3) Economists in particular find that they do not have enough time to attend and prepare for all of the meetings which would ideally benefit from their input. This is partly due to the way the economists' institutes are structured and funded.

Way forward/recommendations

In the short-term, STECF intends to draw on the outcome of the joint STECF/ICES workshop on L-T management plan evaluation to inform the development of interdisciplinary working with the Committee and its Working Groups.

Furthermore, STECF recommends that:

In order to define ways to improve the processes and outputs of interdisciplinary work STECF should convene a workshop with the following aims:

- to review of the strengths and weaknesses of previous attempts at interdisciplinary working,
- to provide a vision of how interdisciplinary working could be more effectively carried out.
- to identify the practical steps to be taken to realise that vision.

It is intended that the solutions identified at the workshop will result in a series of agreed procedural mechanisms to ensure that requests and Terms of Reference to STECF can be adequately addressed.

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9. ANNEXES

All annexes in form of background documents, declaration of invited experts etc. will be published on the STECF web site on https://stecf.jrc.ec.europa.eu/home.

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Abstract
The Scientific, Technical and Economic Committee for Fisheries hold its 29th plenary on 3-7 November 2008 in Brussels. The terms of reference included both issues assessments of STECF working group reports and additional requests submitted to the STECF by the Commission. Topics dealt with ranged from fisheries economics to stock review issues.

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