



Scientific, Technical and Economic Committee for Fisheries (STECF)

Methodologies for 2011 economic reports (STECF-11-03)

Edited by JORDI GUILLEN

This report was adopted by the STECF during its 36th
plenary meeting held from 11th to 15th April, 2011 in Ispra,
Italy

EUR 24828 EN - 2011

The mission of the Institute for the Protection and Security of the Citizen (IPSC) is to provide research results and to support EU policy-makers in their effort towards global security and towards protection of European citizens from accidents, deliberate attacks, fraud and illegal actions against EU policies

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

European Commission
Joint Research Centre
Institute for the Protection and Security of the Citizen

Contact information

Address: TP 051, 21027 Ispra (VA), Italy
E-mail: stecf-secretariat@jrc.ec.europa.eu
Tel.: 0039 0332 789343
Fax: 0039 0332 789658

<https://stecf.jrc.ec.europa.eu/home>
<http://ipsc.jrc.ec.europa.eu/>
<http://www.jrc.ec.europa.eu/>

Legal Notice

Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of this publication.
This report does not necessarily reflect the view of the European Commission and in no way anticipates the Commission's future policy in this area.

***Europe Direct is a service to help you find answers
to your questions about the European Union***

**Freephone number (*):
00 800 6 7 8 9 10 11**

(* Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server <http://europa.eu/>

JRC65056

EUR 24828 EN
ISBN 978-92-79-20348-0
ISSN 1831-9424 (online)
ISSN 1018-5593 (print)
doi:10.2788/21518

Luxembourg: Publications Office of the European Union

© European Union, 2011

Reproduction is authorised provided the source is acknowledged

Printed in Italy

TABLE OF CONTENTS

STECF observation	5
STECF recommendations.....	6
Expert Working Group report	8
1. Executive summary	9
2. Conclusions of the Working Group	14
3. Recommendations of the working group	18
4. Introduction	22
4.1. Terms of Reference for EWG-11-03.....	22
4.2. Participants	23
5. 2011 Annual Economic Report on the EU fishing fleet	24
5.1. Discuss the need for any changes to structure, format and indicators for the 2011 AER on the EU fishing fleet, compared to the 2010 version.....	24
5.2. Discuss and assess proposals for a better methodology, structure and format of the regional chapters.	26
5.3. Discuss and agree on approaches for specific analyses that make use of the latest available data e.g. economic performance projections of specific fleet segments	27
5.4. Brainstorming and discussion of possible topics for the special interest chapter.	29
5.5. Any other matters arising	30
6. 2011 Annual Economic Report on the EU fish processing sector	32
6.1. Discuss and assess proposals for a better structure and format of the national chapters and EU overview.....	32
6.2. Discuss and assess proposals for new indicators	32
6.3. Brainstorming and discussion of possible topics for the special interest chapter.	34
6.4. Any other matters arising	36
7. 2011 Annual Economic Report on the EU aquaculture sector	37
7.1. Discuss and assess proposals for structure and format of the national chapters and EU overview	37
7.2. Discuss and assess proposals for new indicators	37
7.3. Brainstorming and discussion of possible topics for the special interest chapter	39
7.4. Any other matters arising	40
8. Common issues	42

8.1.	Review formulas of the indicators (real interest rate, ROI calculated from EBIT, financial versus economic performance)	42
8.2.	Imputed value of unpaid labour (define methodologies, inclusion in the formulas, use Eurostat data as proxy)	43
8.3.	Any other matters arising	44
9.	APPENDIX I: AER on the EU fishing fleet: Regional chapter template	45
10.	APPENDIX II: AER on the EU fish processing sector: National chapter template ..	46
11.	APPENDIX III: AER on the EU aquaculture sector: National chapter template	50
12.	APPENDIX IV: AER on the EU aquaculture sector: EU overview chapter template	53
13.	EWG-11-03 List of Participants	57

SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (STECF)

Methodologies for 2011 economic reports (STECF-11-03)

THIS REPORT WAS ADOPTED DURING THE PLENARY MEETING HELD IN ISPRA 11-15 APRIL 2011

Request to the STECF

STECF is requested to review the report of the **EWG-11-03** held from March 28 – April 1, 2011 in Athens, evaluate the findings and make any appropriate comments and recommendations.

Introduction

The report of the Expert Working Group on Methodologies for 2011 economic reports (EWG -11-03) was reviewed by the STECF during its 36th plenary meeting held from 11 to 15 April, 2011 in Ispra, Italy. The following observations, conclusions and recommendations represent the outcomes of that review.

STECF observation

STECF recognises that EWG 11-03 addressed all Terms of Reference. The EWG worked on the contents of the three annual economic reports: on the fishing fleet, fish processing and aquaculture. STECF observes that the current fleet report is over 700 pages, and that in future considerations must be given to publish parts of the report in an electronic format and/or a database in order to be made publically available on the STECF web-site. STECF notes that the economic data, provided by MS, are aggregated in accordance with the DCF and there is no confidentiality problem in this case.

STECF notes the proposals for topics to be considered in the chapters of special interest. STECF observes that although the topics are interesting, the link between these and the data gathered under the DCF is not in all cases clear. In some cases the data availability/reliability is questionable (e.g. analysis of the transactions of fishing rights in the EU fleets). Furthermore, it is unclear whether some of the topics are a matter of urgency to deliver an opinion or to support a request for opinion on possible legal proposals to be released by the Commission.

STECF observes the unfortunate delay in publishing last year's AER for the fishing fleet, and discussed the need for projections in this year's report, if this happens this year also. Projections are relevant to show the actual economic status of the fleets, which are not reflected in the collected data due to the delay in availability of economic data. In 2010, projections were made using the EIAA-model. For the 2011 AER for the fishing fleet, the 2010 economic figures could be projected using the simple method developed in SG-MOS 10-06, while the 2011 figures could be based on projections by the EIAA model.

STECF observes that according to the Article 2 (Role of STECF) of Commission Decision Nr. 2005/629/EC the Commission can request STECF opinion on the issues pertaining to the conservation and management of living aquatic resource. The STECF shall draw up an annual report on the economic development of fishery activity, impact of resource management on the economic situation and other economic factors affecting fisheries. The AER on fleet is of first priority and its importance in the bio-economic advice is unquestionable. The reports on the processing and aquaculture sector are of secondary importance. There are linkages between all three sectors, but these are difficult to assess.

STECF observes that a well functioning expert working group has been established in relation to the AER for processing industry, and that the produced report is of a high quality. In relation to aquaculture, there has never been a call for data before, and the availability of economic experts with knowledge of the sector is currently uncertain.

STECF endorses the improvement of structure and layout of the reports outlined in the report of the STECF EWG 11-03 (the final STECF EWG-11-03 report will be published on: <https://stecf.jrc.ec.europa.eu/reports/economic>).

STECF recommendations

STECF recommends to split the AER for fleets in two parts: one part including the general overview, regional chapters and chapters of special interest (which can be properly edited and published on paper) and one part including the national chapters and the appendices (which can put on the JRC website). The data from the appendices could alternatively be made available on the website in an electronic format.

STECF recommends publishing the AERs as soon as possible after the endorsement by STECF as the information analysed is getting out of date fast.

STECF recommends that in the 2011 AER projections for 2010-2011 is included, given that the report is published without delay. STECF endorses using the methodology proposed by the EWG for the 2010-projections and STECF recommends using the EIAA-model for the 2011 figures (potentially in the chapter of special interest). Provisional calculations should, however, be done before the meeting, either by JRC or by short term contracts to keep the workload during the meeting acceptable. In the coming years, STECF recommends an assessment of the usefulness of the FISHRENT model for such assessments.

STECF recommends that topics for the chapters of special interest are chosen that relate directly to the data gathered under the DCF and the (limited) time available at the meeting to produce these is kept in mind.

STECF also recommends establishing clear priorities for the working groups in terms of topics to what to cover (e.g. national chapters, regional analysis, EU overview, other topics and chapters of special interest).

Following Article 2 of Commission Decision Nr. 2005/629/EC of 26 August 2005 STECF must recall its previous recommendations about establishing a link between the fishing sector and processing sector. Furthermore, STECF recommends expanding this investigation to also include the possible links with the aquaculture sector. Pre-analysis of these relationships could be undertaken through a specific contract, and afterwards considered in an expert working group, which could then also consider the consequences in relation to the process for the development of the new DCF.

Given the obvious links between the catching and processing sectors, STECF strongly recommends that the EWG 11-14 is convened to prepare an annual economic report on the fish processing industry and that an annual economic report on the aquaculture would be best addressed through ad hoc contracts with the assistance of JRC experts.

EXPERT WORKING GROUP REPORT

REPORT TO THE STECF

**EXPERT WORKING GROUP ON METHODOLOGIES FOR
2011 ECONOMIC REPORTS (EWG-11-03)**

Athens, Greece, 28 March - 1 April 2011

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

1. EXECUTIVE SUMMARY

The purpose of this EWG 11-03 meeting is to discuss and agree on scope of analysis, methods and indicators for the 2011 AER's on the EU fishing fleet, EU fish processing sector and EU aquaculture sector, based on the 2011 DCF calls for economic data.

A. 2011 Annual Economic Report on the EU fishing fleet

A.1. Discuss the need for any changes to structure, format and indicators for the 2011 AER, compared to the 2010 version.

The size of the data appendices makes the 2010 Annual Economic Report on the EU fishing fleet significantly larger. Therefore, the working group thinks that there is the need that, at the 2011 Annual Economic Report on the EU fishing fleet, the appendix with tables by national fleet segments should be published in electronic format (preferably in a database or data stored on CD-ROM). Besides making the report shorter, this solution would facilitate using the data also for analytical purposes by end users. However, there is the need that DG MARE legal services scrutinises whether storing these data on electronic media conflicts with restrictions imposed by the Commission regulations.

The working group proposed ideas to improve the national and EU overview chapters. Recommendations for the structure and format of the regional analysis chapter are presented in the Appendixes.

A.2. Discuss and assess proposals for a better methodology, structure and format of the regional chapters.

The EWG recognized the need for a commonly accepted methodology to allocate economic data to regions. The workshop on data allocation in July in Hamburg, should further investigate how fleet economic data could be allocated to regions. But the workshop will take place after the meeting in charge of the elaboration of the AER on the EU fishing fleet (EWG 11-04, 23-27 May 2011). So it is recommended that the regional analysis for the 2011 AER on the EU fishing fleet follows a similar methodology that the one in the 2010 AER on the EU fishing fleet.

A.3. Brainstorming and discussion of possible topics for the special interest chapter.

The expert working group proposed the following topics for the special interest chapter of the Annual Economic Report on the EU fishing fleet:

1. Analysis of the subsidies in the EU Fleets and their importance for the fleet profitability.

2. Analysis of the transactions of fishing rights in the EU fleets.
3. Analysis of trade in fish products from trade statistics
4. Analysis of trade in fish species from trade statistics based on some case studies

A.4. Discuss and agree on approaches for specific analyses that make use of the latest available data e.g. economic performance projections of specific fleet segments

The EWG 11-03 recommends to follow the simple and transparent method on projection of economic performance proposed by SG-MOS 10-06a for the 2010 projections. So, the group asks MS that have not provided yet the necessary data (landings, effort and capacity) to provide this data on time for the meeting on the AER of the EU fishing fleet (even though it is after the data call deadline), so that the analysis for 2010 can be done. For 2011 only qualitative forecasts based on experts' knowledge could be done, and 2011 data should not be used for quantitative projections at the 2011 meeting.

A.5. Any other matters arising

The working group recognises that the amended nomenclature for the clusters is a step forward, compared with the previous approach, as it makes the clustering itself evident. However the naming of clustered length classes leaves out information on which length class to fit the segment. The working group anticipated no fully satisfactory solution to this potential problem at this stage, but that MS include the number of vessels by length class of the clustered segments in the comment section of data upload.

The working group proposes the preparation and publication of a leaflet with the summary of the EU overview and main results of the AER of the EU fishing fleet.

B. 2011 Annual Economic Report on the EU fish processing sector

B.1. Discuss and assess proposals for new indicators

It has been agreed the inclusion of the indicator of future expectations of the industry and the replacement of the current productivity indicators of Turnover per FTE and net profit per FTE by the labour and capital productivity indicators.

B.2. Discuss and assess proposals for a better structure and format of the national chapters and EU overview.

The recommended structure and format of the national chapters of the 2011 Annual Economic Report on the EU Fish Processing Sector is presented in the Appendixes. The EU overview chapter in last

years's report was quite complete. So it has been recommended to follow last year's structure and format, only adjusting its subsections to the headings and the order set for the national chapters.

B.3. Brainstorming and discussion of possible topics for the special interest chapter.

The expert working group proposed the following topics for the special interest chapter of the Annual Economic Report on the EU fish processing sector:

1. Analysis of trade in fish products from trade statistics
2. Analyse of the origin of raw materials from trade statistics
3. Analysis of trade in fish products from trade statistics based on some case studies
4. Analysis of the EU competitiveness in the processing sector

B.4. Any other matters arising

The working group also considers that it could be useful to include in the variables requested by future regulations, data on market concentration of the processing sector.

C. 2011 Annual Economic Report on the EU aquaculture sector

C.1. Discuss and assess proposals for new indicators.

It has also been agreed for the Aquaculture report the inclusion of the indicator of future expectations of the industry, the labour productivity and capital productivity indicators.

C.2. Discuss and assess proposals for structure and format of the national chapters and EU overview

For the 2011 Annual Economic Report on the EU Aquaculture sector the experts consider that it is needed to include a glossary section with all the variables requested and the indicators calculated. The group also considers useful to include a section on the different official data sources that are available on aquaculture and analyse their comparability.

The group prepared templates for the EU overview and national chapters that are presented in the Appendixes.

C.3. Brainstorming and discussion of possible topics for the special interest chapter.

The expert working group proposed the following topics for the special interest chapter of the Annual Economic Report on the EU aquaculture sector:

1. Main barriers to growth in the EU aquaculture?

2. Innovation in EU aquaculture.
3. Successful cases of EU aquaculture development
4. Analysis of trade in key species for aquaculture
5. Analysis of the EU competitiveness in the aquaculture sector
6. Analysis of the “fishmeal” trap in EU aquaculture as a barrier to growth
7. Different options to consider “environmental costs” for aquaculture enterprises.

C.4. Any other matters arising

The working group also considers that it could be useful to include in the variables requested by future regulations, data on market concentration of the processing sector.

D. Common issues

D.1. Review formulas of the indicators (real interest rate, ROI calculated from EBIT, financial versus economic performance)

The working group recommended amendments on the AER on the EU fishing fleet formulas of interests/opportunity costs, homogeneity in the DCR and DCF calculations of the Return on Investment (ROI) and Return on Fixed Tangible Assets (ROFTA), calculation of the real interest rate by the most adequate formula and to deduct depreciation of the Operating Cash Flow (OCF) for the DCR data on the AER on the EU fish processing sector.

D.2. Imputed value of unpaid labour (define methodologies, inclusion in the formulas, use Eurostat data as proxy)

The group finds necessary to guarantee the comparability between the three sectors (fishing fleet, fish processing and aquaculture) and their reports. So it has been recommended that the imputed value of unpaid should be estimated, reported and used in the analysis for all sectors.

D.3. Any other matters arising

It has been recommended that the reports should be based on the data available in the DCR and DCF. The group also considers that the national chapters should follow a homogenous structure and outlook. In case national experts want to include tables from other sources than the DCR and DCF, an agreement with the chairman should be reached. Furthermore, the data sources should be clearly specified.

A future best practice for AERs drafting is to provide experts with formats and tables as soon as possible, possibly before the meeting where reports are expected to be written. The group recognises that some tasks can be better carried out by experts when having all the agreed tables and graphs in advance. But it has been also recognised that this is highly influenced by the timing of data uploading by MSs especially when the data uploading happens very late after the deadline. Hence, the group recommends MSs to upload their data within the deadline, and JRC services to further check the computed formulas in relation to the calculation of the indicators.

Taking into account, that the reports on economic performance of fleet, fish processing and forthcoming report on aquaculture are of high importance and should be used as example of good practice of data use and analysis, the group discussed the necessity to improve format, edit and language of the reports. It is recommended that the JRC uses services of professional language editors and layout designers/reviewers before publishing the report.

2. CONCLUSIONS OF THE WORKING GROUP

The size of the data appendices makes the 2010 Annual Economic Report on the EU fishing fleet significantly larger. Therefore, the working group thinks that there is the need that, at the 2011 Annual Economic Report on the EU fishing fleet, the appendix with tables by national fleet segments should be published in electronic format (preferably in a database or data stored on CD-ROM). Besides making the report shorter, this solution would facilitate using the data also for analytical purposes by end users. However, there is the need that DG MARE legal services scrutinises whether storing these data on electronic media conflicts with restrictions imposed by the Commission regulations.

The working group proposed ideas to improve the national and EU overview chapters. Recommendations for the structure and format of the regional analysis chapter are presented in the Appendixes.

The EWG recognized the need for a commonly accepted methodology to allocate economic data to regions. The workshop on data allocation in July in Hamburg, should be further investigated how fleet economic data could be allocated to regions. But the workshop will take place after the meeting in charge of the elaboration of the AER on the EU fishing fleet (EWG 11-04, 23-27 May 2011). So it is recommended that the regional analysis for the 2011 AER on the EU fishing fleet follows a similar methodology that the one in the 2010 AER on the EU fishing fleet.

The EWG 11-03 recommends to follow the simple and transparent method on projection of economic performance proposed by SG-MOS 10-06a for the 2010 projections. So, the group asks MS that have not provided yet the necessary data (landings, effort and capacity) to provide this data on time for the meeting on the AER of the EU fishing fleet (even though it is after the data call deadline), so that the analysis for 2010 can be done. For 2011 only qualitative forecasts based on experts' knowledge could be done, and 2011 data should not be used for quantitative projections at the 2011 meeting.

The working group recognises that the amended nomenclature for the clusters is a step forward, compared with the previous approach, as it makes the clustering itself evident. However the naming of clustered length classes leaves out information on which length class to fit the segment. The working group anticipated no fully satisfactory solution to this potential problem at this stage, but that MS

include the number of vessels by length class of the clustered segments in the comment section of data upload.

The working group proposes the preparation and publication of a leaflet with the summary of the EU overview and main results of the AER of the EU fishing fleet.

The expert working group proposed the following topics for the special interest chapter of the Annual Economic Report on the EU fishing fleet:

- 1. Analysis of the subsidies in the EU Fleets and their importance for the fleet profitability.*
- 2. Analysis of the transactions of fishing rights in the EU fleets.*
- 3. Analysis of trade in fish products from trade statistics*
- 4. Analysis of trade in fish species from trade statistics based on some case studies*

The recommended structure and format of the national chapters of the 2011 Annual Economic Report on the EU Fish Processing Sector is presented in the Appendixes. The EU overview chapter in last years's report was quite complete. So it has been recommended to follow last year's structure and format, only adjusting its subsections to the headings and the order set for the national chapters.

It has been agreed the inclusion of the indicator of future expectations of the industry and the replacement of the current productivity indicators of Turnover per FTE and net profit per FTE by the labour and capital productivity indicators. The working group also considers that it could be useful to include in the variables requested by future regulations, data on market concentration of the processing sector.

The expert working group proposed the following topics for the special interest chapter of the Annual Economic Report on the EU fish processing sector:

- 1. Analysis of trade in fish products from trade statistics*
- 2. Analyse of the origin of raw materials from trade statistics*
- 3. Analysis of trade in fish products from trade statistics based on some case studies*
- 4. Analysis of the EU competitiveness in the processing sector*

For the 2011 Annual Economic Report on the EU Aquaculture sector the experts consider that it is needed to include a glossary section with all the variables requested and the indicators calculated. The

group also considers useful to include a section on the different official data sources that are available on aquaculture and analyse their comparability.

The group prepared templates for the EU overview and national chapters that are presented in the Appendixes.

It has also been agreed for the Aquaculture report the inclusion of the indicator of future expectations of the industry, the labour productivity and capital productivity indicators. The working group also considers that it could be useful to include in the variables requested by future regulations, data on market concentration of the processing sector.

The expert working group proposed the following topics for the special interest chapter of the Annual Economic Report on the EU aquaculture sector:

1. Main barriers to growth in the EU aquaculture?
2. Innovation in EU aquaculture.
3. Successful cases of EU aquaculture development
4. Analysis of trade in key species for aquaculture
5. Analysis of the EU competitiveness in the aquaculture sector
6. Analysis of the “fishmeal” trap in EU aquaculture as a barrier to growth
7. Different options to consider “environmental costs” for aquaculture enterprises.

The working group recommended amendments on the AER on the EU fishing fleet formulas of interests/opportunity costs, homogeneity in the DCR and DCF calculations of the Return on Investment (ROI) and Return on Fixed Tangible Assets (ROFTA), calculation of the real interest rate by the most adequate formula and to deduct depreciation of the Operating Cash Flow (OCF) for the DCR data on the AER on the EU fish processing sector.

The group finds necessary to guarantee the comparability between the three sectors (fishing fleet, fish processing and aquaculture) and their reports. So it has been recommended that the imputed value of unpaid should be estimated, reported and used in the analysis for all sectors.

It has been recommended that the reports should be based on the data available in the DCR and DCF. The group also considers that the national chapters should follow a homogenous structure and outlook. In case national experts want to include tables from other sources than the DCR and DCF, an

agreement with the chairman should be reached. Furthermore, the data sources should be clearly specified.

A future best practice for AERs drafting is to provide experts with formats and tables as soon as possible, possibly before the meeting where reports are expected to be written. The group recognises that some tasks can be better carried out by experts when having all the agreed tables and graphs in advance. But it has been also recognised that this is highly influenced by the timing of data uploading by MSs especially when the data uploading happens very late after the deadline. Hence, the group recommends MSs to upload their data within the deadline, and JRC services to further check the computed formulas in relation to the calculation of the indicators.

Taking into account, that the reports on economic performance of fleet, fish processing and forthcoming report on aquaculture are of high importance and should be used as example of good practice of data use and analysis, the group discussed the necessity to improve format, edit and language of the reports. It is recommended that the JRC uses services of professional language editors and layout designers/reviewers before publishing the report.

3. RECOMMENDATIONS OF THE WORKING GROUP

EU fishing fleet AER

The size of the data appendices makes the report significantly larger. Therefore, the working group recommends that the appendix with tables by national fleet segments should be published in electronic format (preferably in a database or data stored on CD-ROM).

EWG 11-03 recommends to have scrutinised by DG MARE legal services whether storing these data on electronic media conflicts with restrictions imposed by the Commission regulations (Council Regulation EC 199/2008 and others).

There is a need for a commonly accepted methodology to allocate economic data to regions. The EWG 11-03 recommends that in the workshop on data allocation in July in Hamburg, it should be further investigated how fleet economic data could be allocated to regions.

Since the Hamburg workshop will take place after the meeting in charge of the elaboration of the AER on the EU fishing fleet (EWG 11-04, 23-27 May 2011), the EWG 11-03 recommends that the regional analysis for the 2011 AER on the EU fishing fleet follows a similar methodology that the one in the 2010 AER on the EU fishing fleet.

The EWG 11-03 recommends to follow the simple and transparent method on projection of economic performance proposed by SG-MOS 10-06a for the 2010 projections.

Landings, capacity and effort data for 2010 was not fully available at the data call deadline for some MS that are using sampling methods to collect transversal variables. However, most MS should have this data available by May. Therefore, the working group recommends that MS provide this data on time for the meeting on the AER of the EU fishing fleet (even though it is after the data call deadline), so that the analysis for 2010 can be done.

For 2011 no landings or effort data is available and only capacity totals could be available. Having discussed possible methodologies, the working group recommends that for 2011 only qualitative

forecasts based on experts' knowledge could be done, and 2011 data should not be used for quantitative projections at the 2011 meeting.

The working group recommendations for the structure and format of the regional analysis chapter are presented in the Appendixes. Proposals for improvements in the national and EU overview chapters have been developed in the text.

EU fish processing AER

The working group recommendation for the structure and format of the national chapters is presented in Appendix II. The working group finds that the EU overview chapter in last year's report was quite complete. So, the EWG 11-03 recommends following last year's structure and format of the EU overview chapter, and only adjusting its subsections to the headings and the order set for the national chapters.

The working group recommends the inclusion of the indicator of future expectations of the industry and that the labour and capital productivity indicators would substitute the current productivity indicators of Turnover per FTE and net profit per FTE on the EU processing report.

The working group recommends to include in the variables requested by the regulation data on market concentration of the processing sector. This new data requested would require the turnover by company. It could be information on all enterprises and their individual turnover in order to calculate e.g. Herfindahl index, but it is more likely that most countries are able to present the turnover of their biggest companies. With this information Concentration Ratio (CR) could be calculated. If it should be CR4 or CR8 or any other is an open question. However, it could be against the EU statistical confidentiality law to provide this information by firm, it could be then possible to directly request for such an indicator in the regulation.

EU Aquaculture AER

The experts working group recommends to include a glossary section with all the variables requested and the indicators calculated in the aquaculture report.

The working group recommends to include a section on the different official data sources that are available on aquaculture and analyse their comparability.

The working group recommendation for the structure and format of the EU overview and national chapters are presented on templates in the Appendixes.

The experts working group recommends to include on the aquaculture report the same indicators (indicator of future expectations of the industry, labour productivity and capital productivity) proposed for the EU fish processing sector.

The working group recommends to include in the variables requested by the regulation data on market concentration of the aquaculture sector. This new data requested would require the turnover by company. It could be information on all enterprises and their individual turnover in order to calculate e.g. Herfindahl index, but it is more likely that most countries are only able to present the turnover of their biggest companies. With this information Concentration Ratio (CR) could be calculated. If it should be CR4 or CR8 or any other is an open question. However, since it could be against the EU statistical confidentiality law to provide this information by firm, it could be then possible to directly request for such an indicator in the regulation.

Common issues

EWG 11-03 recommends to amend on the AER on the EU fishing fleet the formula of interests/opportunity costs following the STECF recommendations of its spring 2010 plenary: Fishing rights should not be taken into account in the total amount of the capital value.

EWG 11-03 recommends that the Return on Investment (ROI) and Return on Fixed Tangible Assets (ROFTA) has to produce the same results for both the DCR and DCF, on the AER on the EU fishing fleet. Specifically, EWG 11-03 notes that the formula reported for DCR includes capital costs where it is not always known if they include only depreciation (capital costs in DCF) or both depreciation and interests. If capital costs include only depreciation hence ROI and ROFTA have a different meaning. In the first case it is equal to GCF/Investment, in the second case it will be EBIT/Capital value. In case of non comparability this should be noted in the report

EWG 11-03 recommends being more precise and calculating the real interest rate by the adequate formula on the AER on the EU fishing fleet: $r = [(1 + i)/(1 + \pi)] - 1$.

EWG 11-03 recommends that depreciation should not be deducted on the formula of the Operating Cash Flow (OCF) for the DCR data on the AER on the EU fish processing sector.

The group recommends that in order to guarantee the comparability between the three sectors (and their reports) the imputed value of unpaid labour should be estimated, reported and used in the analysis for all sectors.

The EWG-11-03 recommends that the reports should be based on the data available in the DCR and DCF. The group also considers that the national chapters should follow a homogenous structure and outlook. In case national experts want to include tables from other sources than the DCR and DCF, an agreement with the chairman should be reached. Furthermore, the data sources should be clearly specified.

EWG 11-03 recommends that a future best practice for AERs drafting is to provide experts with formats and tables as soon as possible, possibly before the meeting where reports are expected to be written. The group recognises that some tasks can be better carried out by experts when having all the agreed tables and graphs in advance.

The group also recognises that this is highly influenced by the timing of data uploading by MSs especially when the data uploading happens very late after the deadline. Hence, the group recommends MSs to upload their data within the deadline.

The group also recommends JRC services to further check the computed formulas in relation to the calculation of the indicators.

Taking into account, that the reports on economic performance of fleet, fish processing and forthcoming report on aquaculture are of high importance and should be used as example of good practice of data use and analysis, the group discussed the necessity to improve format, edit and language of the reports. It is recommended that the JRC uses services of professional language editors and layout designers/reviewers before publishing the report.

4. INTRODUCTION

STECF's Expert Working Group 11-03 convened in Athens (28th March – 1st April, 2011) to discuss and seek agreement on the content, indicators, methodologies and format of the 2011 Annual Economic Reports (AER) on the EU fishing fleet, the fish processing and the aquaculture sectors.

Proposals for improved contents and the overall structure were discussed. Templates for the national and EU overview chapters for the EU the fish processing and the aquaculture sectors were produced. Indicators for the EU fishing fleet and fish processing reports were reviewed; new indicators for the fish processing and the aquaculture sector reports were proposed. And topics of special interest were proposed for all three reports.

4.1. Terms of Reference for EWG-11-03

The purpose of this meeting is to discuss and agree on scope of analysis, methods and indicators for the 2011 AER's on the EU fishing fleet, EU fish processing sector and EU aquaculture sector, based on the 2011 DCF calls for economic data.

EWG 11-03 is especially requested to work on and comment on the following items:

A. 2011 Annual Economic Report on the EU fishing fleet

- Discuss the need for any changes to structure, format and indicators for the 2011 AER, compared to the 2010 version.
- Discuss and assess proposals for a better methodology, structure and format of the regional chapters.
- Brainstorming and discussion of possible topics for the special interest chapter.
- Discuss and agree on approaches for specific analyses that make use of the latest available data e.g. economic performance projections of specific fleet segments
- Any other matters arising

B. 2011 Annual Economic Report on the EU fish processing sector

- Discuss and assess proposals for new indicators
- Discuss and assess proposals for a better structure and format of the national chapters and EU overview.
- Brainstorming and discussion of possible topics for the special interest chapter.

- Any other matters arising

C. 2011 Annual Economic Report on the EU aquaculture sector

- Discuss and assess proposals for new indicators.
- Discuss and assess proposals for structure and format of the national chapters and EU overview
- Brainstorming and discussion of possible topics for the special interest chapter.
- Any other matters arising

D. Common issues

- Review formulas of the indicators (real interest rate, ROI calculated from EBIT, financial versus economic performance)
- Imputed value of unpaid labour (define methodologies, inclusion in the formulas, use Eurostat data as proxy)

4.2. Participants

The full list of participants at EWG-11-03 is presented in section 13.

5. 2011 ANNUAL ECONOMIC REPORT ON THE EU FISHING FLEET

5.1. Discuss the need for any changes to structure, format and indicators for the 2011 AER on the EU fishing fleet, compared to the 2010 version.

General issues

EWG 11-03 agreed on the need for a more concise version of the AER and proposes the following improvements.

The size of the data appendices makes the report significantly larger. Therefore, the working group recommends that the appendix with tables by national fleet segments should be published in electronic format (preferably in a database or data stored on CD-ROM). EWG 11-03 recommends to have scrutinised by DG MARE legal services whether storing these data on electronic media conflicts with restrictions imposed by the Commission regulations (Council Regulation EC 199/2008 and others). Besides making the report shorter, a CD solution would facilitate using the data also for analytical purposes by end users.

Tables and figures which take up a lot of space should always be placed in the appendices and instead replaced by a concise paragraph explaining the important points as a reference. As a general rule, all tables and figures should be referenced in the text.

For the improvement of the general format of the report, spaces next to figures should not be left blank and the most efficient use of space should be practised. Wherever feasible, two figures side by side would be preferred to two figures over each other.

The working group also discussed whether an Arial 12 font was appropriate, but no agreement was reached.

If deemed applicable, trends can be shown by graphs and do not necessarily need to be further described within the text, when they are of minor importance.

Y axes of figures should start at zero, as otherwise they do not show clearly the changes in the sector. For the sake of comparability, adjacent figures should be scaled homogeneously, wherever feasible.

The report should have a top down approach beginning with the EU overview chapter, followed by the regional overview chapter and lastly the national chapters.

Chapter 2: EU overview

All tables regarding data issues such as coverage should be aggregated in one section related to data issues. A clear reference of the data coverage should be made in the analysis.

Figure 2.2 referring to the average age of the EU fleet can be removed as long as the changes are documented in the text. Experience has shown that there are no major changes in the EU fleet average age trend to be highlighted by figures.

Figure 2.3 referring to EU fishing enterprises and the corresponding figures in the national chapters can be removed as they are not considered to be of major analytical importance.

Figure 2.5 and the corresponding text referring to the average wage per FTE should be moved to the socio-economic performance section rather than being placed in the section regarding the fleet structure.

An analysis of fishing activities in different regions is proposed to be added as part of section 2.3 referring to the EU fishing fleet activity, to show the effort in the different areas. This should include volume and value of landings and number of days at sea.

Tables 2.5, 2.6 and Figure 2.13 should be moved to the annex because they contain too many details to be included in the EU overview chapter. These figures should be referenced in the text instead.

Figure 2.14 should be accompanied by text and the numbers should not be displayed in decimal format.

Chapter 3: National Chapters

The figures regarding national fleet capacity trends contained in the national chapters could include both active and non-active vessels, illustrated separately.

The tables regarding fleet composition and key indicators (e.g. in table 3.3.2) should not include inactive vessels and instead should contain totals.

Fleets of special interest should not be separated into sections and instead should be included under one section entitled 'Fleets of Special Interest'.

National chapters are proposed to be more concise. However, it is considered useful if an additional section is added to the national chapters of the report. This section should include comments with regard to the coverage and quality of the data. Experts would have the possibility to comment on any aspects which are deemed important.

Chapter 4: EU fish prices and markets analysis

It is proposed to move the large tables regarding fish price data in chapter 4 to the annex as they are too detailed.

Appendices

Appendix 5 regarding national data tables by fleet segment are to be saved in an electronic format instead of being part of the report. These tables should also include the average age of the vessels.

The tables and figures which were proposed to be removed from the EU overview, regional overview and EU fish price and market analysis chapters, should be provided in three additional corresponding appendices.

All abbreviations (and not only those related to fishing techniques) should be listed before the EU fleet overview, i.e. at the beginning of the report after the contents.

The tables regarding fish prices in chapter 4 and the corresponding ones in the annex should include the full species name (e.g. not just shrimp but 'Deep Water Rose Shrimp') as provided on page 269 in the 2010 AER.

5.2. Discuss and assess proposals for a better methodology, structure and format of the regional chapters.

Allocation of economic data to regions

In the 2010 Annual Economic Report on the EU Fishing Fleet, economic performance and data have been reported by fleet segment and by country and transversal variables by regions in the regional analysis chapter.

The expert working group suggests that this can be improved using effort data and volume or value of landings in different regions as a basis to allocate the economic data to regions. However, a similar procedure was used on the elaboration of the regional analysis during the 2009 AER on the EU fishing fleet, but it was criticised. So, this should be considered only a preliminary approach which requires further investigation in the future.

Therefore, there is a need for a commonly accepted methodology to allocate economic data to regions. The EWG 11-03 recommends that in the workshop on data allocation in July in Hamburg, it should be further investigated how fleet economic data could be allocated to regions. However, this workshop will take place after the meeting in charge of the elaboration of the AER on the EU fishing fleet (EWG 11-04, 23-27 May 2011). So, the EWG 11-03 recommends that the regional analysis for the 2011 AER on the EU fishing fleet follows a similar methodology that the one in the 2010 AER on the EU fishing fleet.

Structure and format of the regional analysis chapter

The working group considered that the different regions should follow a similar structure. The analysis should be made on regional basis, not by country. It was also suggested that the analysis should examine the average performance of the fleet segments. Average (per vessel) performance allows for better comparability of fleets. These indicators should be available for analysis in the AER elaboration meeting.

The working group recommendations for the structure and format of the regional analysis chapter are presented in Appendix I.

5.3. Discuss and agree on approaches for specific analyses that make use of the latest available data e.g. economic performance projections of specific fleet segments

The most recent call for fleet economic data included a request for capacity, effort and landings data for 2010, and regarding capacity, for 2011 as well. Using this data, additional analyses can be carried out, e.g. projections on the economic performance of the fleet segments. The basic idea behind this is to use the most recent data available to estimate other variables (i.e. basically cost variables) that are not available for the previous year at the time of the AER compilation.

Of the variables transmitted through the call for data in February 2011 data on 2010 landings, capacity and effort are available for projections. For some MS that are using sampling methods to collect these transversal variables, the data for 2010 was not available at the data call deadline. However, most MS

should have this data available by May. Therefore, the working group recommends that MS provide this data on time for the meeting on the AER of the EU fishing fleet (even though it is after the data call deadline), so that the analysis for 2010 can be done.

A simple and transparent method on projection of economic performance was proposed by SG-MOS 10-06a. The EWG 11-03 recommends to follow this approach for the 2010 projections. The method in the report is described as follows:

The values of landings were the only economic variables available for analysis which could be specifically assigned to Baltic cod fishery. Thus estimates of income from Baltic cod fishery could be regarded as acceptable. Cost variables also had to be estimated for 2009. Crew wages were estimated as proportion of value of landings (average in 2006-2008). Non-variable costs were estimated proportional to the number of vessels. Employment and all other cost variables were estimated proportional to effort observed in previous years. The fuel costs were amended using a factor of 0.7, derived from price indices on fuel oil to address price changes from 2008 to 2009. (p.28)

For the EWG 11-04 meeting, 2010 data should be available to do projections on 2010. For 2011 no landings or effort data is available and only capacity totals could be available. It is tricky to allocate vessels to gear classes without comprehensive effort datasets. It was discussed to use TAC-changes as basis for economic projection, since data on fuel price, fish price and TACs could be available for the first months of 2011 for some MS (and some fisheries). Finally, the working group recommends that for 2011 only qualitative forecasts based on experts' knowledge could be done, and 2011 data should not be used for quantitative projections at the 2011 meeting.

The participants discussed that additional input on the 2011 economic performance could be provided by stakeholders, e.g. regional bodies such as the RACs.

Estimation of costs according to SG-MOS 10-06

All estimations are carried on a segment level basis.

Crew wages (CW) were estimated as an average proportion of the value of landing (VaL)¹ during the three previous years:

¹ "VaL" is preferred to "VL" used at the SGMOS-10-06 as the acronym for Value of Landings, in order to avoid any confusion with Vessel Length.

$$CW_t = \frac{\sum_{t-3}^{t-1} CW}{\sum_{t-3}^{t-1} VaL} \times VaL_t$$

Non-variable costs (NVC) were estimated using the change in capacity i.e. number of vessels (N):

$$NVC_t = \frac{N_t}{N_{t-1}} \times NVC_{t-1}$$

Variable costs (VC) are projected using changes in effort, i.e. Days at Sea (DAS):

$$VC_t = \frac{DAS_t}{DAS_{t-1}} \times VC_{t-1}$$

The same method is to be applied on variable costs is applied at repair and maintenance.

Fuel costs (FC) are projected using changes in effort (DAS) and change in average fuel price (P):

$$FC_t = \frac{DAS_t}{DAS_{t-1}} \times \frac{P_t}{P_{t-1}} \times FC_{t-1}$$

EWG 11-03 further discussed including price changes in the formulas (as in the case of fuel costs), This approach was decided to be postponed, as in most cases the short-term influence on price changes is negligible, compared to the uncertainty which is inherent in the estimation process.

5.4. Brainstorming and discussion of possible topics for the special interest chapter.

The expert working group proposed the following topics for the special interest chapter of the Annual Economic Report on the EU fishing fleet:

1. Analysis of the subsidies in the EU Fleets and their importance for the fleet profitability.

2. Analysis of the transactions of fishing rights in the EU fleets.

3. Analysis of trade in fish products from trade statistics

The analysis could be interesting in terms of increasing the knowledge about the import, export and trade balance in different kind of fish products. For e.g. the analysis could be made on the level of 4 digits CN (Combined Nomenclature) code where there are 9 main products groups:

- Live fish (CN 0301);

- Fresh or chilled fish (CN 0302);
- Frozen fish (CN 0303);
- Fish fillets and other fish meat (CN 0304);
- Fish, dried, salted or in brine; smoked fish, whether or not cooked before or during the smoking process; flours, meals and pellets of fish (CN 0305);
- Crustaceans for human consumption (CN 0306);
- Molluscs for human consumption (CN 0307);
- Prepared or preserved fish; caviar and caviar substitutes prepared from fish eggs (CN 1604);
- Crustaceans, molluscs and other aquatic invertebrates prepared or preserved (CN 1605).

The information about external trade by each product on EU level and by country is available through the EU Markets Assess Database². However, if not performed at a very simple level, this analysis can be quite lengthy, deserving a whole report rather than just one chapter. So even if we find this topic interesting, we don't recommend this to be a chapter of the report given the limited capacities during the meeting.

4. Analysis of trade in fish species from trade statistics based on some case studies

A similar proposal would be to analyse several key species (cod, hake, pangasius, blue fin tuna, etc.) that could be of interest to have an overview of the market. Some imported species clearly compete with the EU fleet landings. Trade statistics on fresh, frozen and chilled fish could be used for that purpose. The import of these products and origin could be analysed in the report as well as national sources of the species (fleet and aquaculture sectors). Again, this analysis can be quite lengthy, deserving a whole report rather than just one chapter. So even if we find this topic interesting, we don't recommend this to be a chapter of the report given the limited capacities during the meeting.

5.5. Any other matters arising

Naming convention of clustering in 2011 call for data

There is a possible issue when all clustered segments are inserted in the name e.g. DFN-HOK when comparing MS fleet performance over time or comparing economic performance between MS. Since the segment is named with the dominant gear first this may not be a real problem. However the naming of clustered length classes leaves out information on which length class to fit the segment. This may be an issue when comparing segments across MS in a European perspective. However, the working group anticipated no fully satisfactory solution to this potential problem at this stage, but that MS include the number of vessels by length class of the clustered segments in the comment section of data upload.

The working group recognises that the amended nomenclature is definitely a step forward, compared with the previous approach, as it makes the clustering itself evident.

Preparation of a leaflet

The working group proposes the preparation and publication of a leaflet with the summary of the EU overview and main results of the AER of the EU fishing fleet. The leaflet is proposed to contain graphs and be developed in an user-friendly way, so that it can be addressed to the general public. The leaflet should contain clear references to the AER of the EU fishing fleet. However, the contents, the format and the preparation of the leaflet should be beyond the scope of EWG 11-04.

² http://madb.europa.eu/mkacadb2/statistical_form.htm#

6. 2011 ANNUAL ECONOMIC REPORT ON THE EU FISH PROCESSING SECTOR

6.1. Discuss and assess proposals for a better structure and format of the national chapters and EU overview.

The working group recommendation for the structure and format of the national chapters is presented in Appendix II.

The working group agreed that the “Running cost to turnover ratio” indicator should be used as indicator for the economic performance, and not the productivity. Labour productivity (Gross Value Added divided by Full Time Equivalents) and Capital productivity (Gross Value Added divided by total value of assets) indicators would substitute the current productivity indicators of Turnover per FTE and net profit per FTE, as detailed on next section.

The working group finds that the EU overview chapter in last years's report was quite complete. So, the EWG 11-03 recommends following last year's structure and format of the EU overview chapter, and only adjusting its subsections to the headings and the order set for the national chapters. It has been also suggested that the number of figures in the chapter should be reduced from 13 to maybe 8.

6.2. Discuss and assess proposals for new indicators

The working group recommends the inclusion of the Indicator of Future expectations of the Industry and that the labour and capital productivity indicators would substitute the current productivity indicators of Turnover per FTE and net profit per FTE.

Productivity indicators

Labour and capital productivity may be used to compare the productivity between MS and also within MS over time. Their calculation is straight forward and they are considered standard indicators.

Labour productivity is calculated as the average output per worker or per time unit. For the data collected under the DCF this can be calculated as *Gross Value Added (GVA)* divided by *Full Time Equivalents (FTE)*. The indicator describes the value added to the economy from the activity, in this case the value added to the economy by one FTE.

$$\text{Labour productivity} = \frac{GVA}{FTE}$$

When a MS cannot report level of employment as FTEs, number of employees can be used as a second best alternative. However, this alternative compromises the comparison and should be clearly stated in the report.

Capital productivity is calculated as the average output per unit of capital. For the data collected under the DCF this can be calculated as *Gross Value Added (GVA)* divided by *Capital value (total value of assets)*. The indicator describes the value added to the economy by one unit of capital.

$$\text{Capital productivity} = \frac{GVA}{\text{Capital_value}}$$

These indicators would substitute the current productivity indicators of Turnover per FTE and net profit per FTE.

Indicator of Future Expectations of the Industry

A recommendation for the inclusion of an indicator of the industry’s confidence in the market was already included in the SGECA 10-04 report:

“STECF notes that the working group discussed the inclusion of an indicator for the sector's expectations on the future development of the companies. A possible indicator is the relation between net investment and depreciation. STECF recommends to test the utility of this indicator in next year's report”.

The expert group observed that the similar indicator divided by capital value would be more appropriated to compare among industries of different sizes. The indicator (Future Expectations of the Industry) could be interpreted as a proxy for the industry’s wish to remain in the market in the medium/long term. If investment minus depreciation is positive, it would mean that the sector is allocating resources to increase its production capacity, and therefore expects to remain in the market in order to recover the cost of that investment. If the investment net of depreciation indicator is close to zero, it could be interpreted as an indicator that the sector is only wishing to maintain its production capacity in the future, and therefore is not planning to expand. The third case would be when the sector is not even covering its depreciation costs, thus disinvesting with the possible intention to reduce its presence in the market. Therefore, the indicator would be used to approximate the industry’s investing behaviour in the future and it has been considered useful by the experts.

$$FEI = \frac{(\text{Net_investments} - \text{Depreciation})}{\text{Capital_value}}$$

The calculation of the indicator is feasible with the actual data available in the DCF. Depreciation is available and also “Net Investments”. However, it has been noted by the experts that the data item denominated “Net Investments” in the DCF regulation does not refer to investment net of depreciation, but instead to the net investments realised in a year (Purchase and Sale of assets during the year). This may cause some confusion to the end user, as in standard terms, and always with respect to depreciation, the denomination of this DCF data item should be Gross investment. Therefore it is suggested that the proposed indicator should be considered “Investment net of depreciation”.

The interpretation of this indicator should be taken with some reservation in the case that the Net Investments data item also includes investments outside the Member State, as then the decision on investment may also have been motivated by lower production costs in other countries and not by positive expectation on the future of the sector. As well as, the possibility to have part of the investment subsidised (i.e. EFF) can also affect the investment decision.

The experts considered that an alternative measure for this indicator using the Capital value (total value of assets) data item is not appropriate because the number of companies in the sector is changing each year.

6.3. Brainstorming and discussion of possible topics for the special interest chapter.

The expert working group proposed the following topics for the special interest chapter of the Annual Economic Report on the EU fish processing sector:

1. Analysis of trade in fish products from trade statistics

The analysis could be interesting in terms of increasing the knowledge about the import, export and trade balance in different kind of fish products. For e.g. the analysis could be made on the level of 4 digits CN (Combined Nomenclature) code where there are 9 main products groups:

- Live fish (CN 0301);
- Fresh or chilled fish (CN 0302);
- Frozen fish (CN 0303);
- Fish fillets and other fish meat (CN 0304);
- Fish, dried, salted or in brine; smoked fish, whether or not cooked before or during the smoking process; flours, meals and pellets of fish (CN 0305);
- Crustaceans for human consumption (CN 0306);
- Molluscs for human consumption (CN 0307);

- Prepared or preserved fish; caviar and caviar substitutes prepared from fish eggs (CN 1604);
- Crustaceans, molluscs and other aquatic invertebrates prepared or preserved (CN 1605).

The information about external trade by each product on EU level and by country is available through the EU Markets Assess Database³. However, if not performed at a very simple level, this analysis can be quite lengthy, deserving a whole report rather than just one chapter. So even if we find this topic interesting, we don't recommend this to be a chapter of the report given the limited capacities during the meeting.

2. Analyse of the origin of raw materials from trade statistics

Another proposal would be to analyse the origin of raw materials. Trade statistics on fresh, frozen and chilled fish (as the main source of raw material) could be used for that purpose. The import of these products and origin could be analysed in the report as well as national sources of raw materials (fleet and aquaculture sectors). Again, this analysis can be quite lengthy and it is difficult to distinguish the products that are used for raw materials or are sold directly into the market. So, it would deserve a whole report rather than just one chapter. Thus, even if we find this topic interesting, we don't recommend this to be a chapter of the report given the limited capacities during the meeting.

3. Analysis of trade in fish products from trade statistics based on some case studies

A similar proposal would be to analyse several species/products (salmon, cod, pangasius, etc.) that could be of interest for the processing industry. Trade statistics on fresh, frozen and chilled fish (as the main source of raw material) could be used for that purpose. The import of these products and origin could be analysed in the report as well as national sources of raw materials (fleet and aquaculture sectors). Again, this analysis can be quite lengthy and it is difficult to distinguish the products that are used for raw materials or are sold directly into the market.

4. Analysis of the EU competitiveness in the processing sector

Using Eurostat data calculate Balassa indexes for the EU and the different MS. This could be done for the product groups that are more related to processed products: CN 0303, CN 0304, CN 0305, CN 1604 and CN 1605.

Balassa Index in terms of value and quantity can be calculated:

$$\text{Index} = (\text{Exports} - \text{Imports}) / (\text{Exports} + \text{Imports})$$

If $B > 0$ means that the sector is competitive (has relative comparative advantage).

³ http://madb.europa.eu/mkacadb2/statistical_form.htm#

6.4. Any other matters arising

Market concentration indicators

The working group recommends to include in the variables requested by the regulation data on market concentration of the sector. This new data requested would require the turnover by company. It could be information on all enterprises and their individual turnover in order to calculate e.g. Herfindahl index, but it is more likely that most countries are just able to present the turnover of their biggest companies. With this information Concentration Ratio (CR) could be calculated. If it should be CR4 or CR8 or any other is an open question.

- CR4: Four-Firm Concentration Ratio: It measures the total market share of the four largest firms in an industry.
- CR8: Eight-Firm Concentration Ratio: It measures the total market share of the eight largest firms in an industry.

Since it could be against the EU statistical confidentiality law to provide this information by firm, it could be then possible to directly request for such an indicator in the regulation.

The group realised that ideally the size group should be used as a segmentation criteria. But important data could be lost because the EU statistical confidentiality law and the low number of companies in some segments for some MS. This should be further discussed when revising the DCF.

Origin of raw material

The information of origin of raw material may be twofold. One is to distinguish between wild catch and aquaculture, the other one is the country of origin, especially the question domestic, EU or non-EU source of the raw material. The working group did not find a consensus how this information could be integrated into a future regulation.

Spatial concentration

The working group discussed the issue of spatial concentration of the enterprises to be part of the national chapter. Currently this could be done only by experts with the respective knowledge of a countries fish processing sector. But it was agreed to discuss this topic and possible solutions during the review process of the regulation.

7. 2011 ANNUAL ECONOMIC REPORT ON THE EU AQUACULTURE SECTOR

7.1. Discuss and assess proposals for structure and format of the national chapters and EU overview

The experts working group recommends to include a glossary section with all the variables requested and the indicators calculated in the report. The working group recommends to include a section on the different official data sources that are available on aquaculture and analyse their comparability.

The working group recommendation for the structure and format of the national chapter is presented in Appendix III.

The working group recommendation for the structure and format of the EU overview chapter is presented in Appendix IV.

7.2. Discuss and assess proposals for new indicators

The experts working group recommends to include the same indicators proposed for the EU fish processing sector.

Productivity indicators

Labour and capital productivity may be used to compare the productivity between MS and also within MS over time. Their calculation is straight forward and they are considered standard indicators.

Labour productivity is calculated as the average output per worker or per time unit. For the data collected under the DCF this can be calculated as *Gross Value Added (GVA)* divided by *Full Time Equivalents (FTE)*. The indicator describes the value added to the economy from the activity, in this case the value added to the economy by one FTE.

$$\text{Labour productivity} = \frac{GVA}{FTE}$$

When a MS cannot report level of employment as FTEs, number of employees can be used as a second best alternative. However, this alternative compromises the comparison and should be clearly stated in the report.

Capital productivity is calculated as the average output per unit of capital. For the data collected under the DCF this can be calculated as *Gross Value Added (GVA)* divided by *Capital value (total value of assets)*. The indicator describes the value added to the economy by one unit of capital.

$$\text{Capital productivity} = \frac{GVA}{\text{Capital_value}}$$

Indicator of Future expectations of the Industry

The indicator (Future Expectations of the Industry) could be interpreted as a proxy for the industry's wish to remain in the market in the medium/ long term. If investment minus depreciation is positive, it would mean that the sector is allocating resources to increase its production capacity, and therefore expects to remain in the market in order to recover the cost of that investment. If the investment net of depreciation indicator is close to zero, it could be interpreted as an indicator that the sector is only wishing to maintain its production capacity in the future, and therefore is not planning to expand. The third case would be when the sector is not even covering its depreciation costs, thus disinvesting with the possible intention to reduce its presence in the market. Therefore, the indicator would be used to approximate the industry's investing behaviour in the future and it has been considered useful by the experts.

$$FEI = \frac{(\text{Net_investments} - \text{Depreciation})}{\text{Capital_value}}$$

The calculation of the indicator is feasible with the actual data available in the DCF. Depreciation is available and also "Net Investments". However, it has been noted by the experts that the data item denominated "Net Investments" in the DCF regulation does not refer to investment net of depreciation, but instead to the net investments realised in a year (Purchase and Sale of assets during the year). This may cause some confusion to the end user, as in standard terms, and always with respect to depreciation, the denomination of this DCF data item should be Gross investment. Therefore it is suggested that the proposed indicator should be considered "Investment net of depreciation".

The interpretation of this indicator should be taken with some reservation in the case that the Net Investments data item also includes investments outside the Member State, as then the decision on investment may also have been motivated by lower production costs in other countries and not by positive expectation on the future of the sector.

The experts considered that an alternative measure for this indicator using the Capital value (total value of assets) data item is not appropriate because the number of companies in the sector is changing each year.

7.3. Brainstorming and discussion of possible topics for the special interest chapter

The expert working group proposed the following topics for the special interest chapter of the Annual Economic Report on the EU aquaculture sector:

1. Main barriers to growth in the EU aquaculture?

- Regulations
- Management
- Feed sources
- Innovation
- Competition inside and outside EU
- Competition/interaction between Aquaculture and Fisheries (spatial, employment, market)
- Spatial competition with other uses

2. Innovation in EU aquaculture.

- Innovation in aquaculture such as new species, new technologies, new marketing strategies, resource efficiency and productivity.
- Eco-innovation is defined by DG ENV (EC) as eco-innovative products, techniques, services or processes which aim at the prevention or the reduction of environmental impacts or which contribute to the optimal use of resources.
- Ecological aquaculture in EU: status quo and opportunities for future development.

3. Successful cases of EU aquaculture development

- Description of the cases
- Key aspects for success (market, technologies, etc).
- Lessons and recommendations

4. Analysis of trade in key species for aquaculture

The analysis could be interesting in terms of increasing the knowledge about the import, export and trade balance for different key species in aquaculture (salmon, sea bass, sea bream, mussels, pangasius, etc.). The information about external trade by each product on EU level and by country is available

through the EU Markets Assess Database⁴. Again, if not performed at a very simple level, this analysis can be quite lengthy, deserving a whole report rather than just one chapter. So even if we find this topic interesting, we don't recommend this to be a chapter of the report given the limited capacities during the meeting.

5. Analysis of the EU competitiveness in the aquaculture sector

Using Eurostat data calculate Balassa indexes for the EU and the different MS.

Balassa Index in terms of value and quantity can be calculated:

$$\text{Index} = (\text{Exports} - \text{Imports}) / (\text{Exports} + \text{Imports})$$

If $B > 0$ means that the sector is competitive (has relative comparative advantage).

6. Analysis of the “fishmeal” trap in EU aquaculture as a barrier to growth

Fish feed could become a bottleneck, because the feed for fish in aquaculture often contains fishmeal and fish oil produced from wild fish. Possible feed substitutes and consequences for quality such as health (omega 3), productivity (slower growth rates), sustainability (overfishing) and availability for consumers could be analysed.

7. Different options to consider “environmental costs” for aquaculture enterprises.

Environmental constraints/restrictions in some cases represent indirect costs of the industry and they are not considered as “economic performance indicator”.

The topic will investigate if in some MS there is a green accounting. In this case, the best “accounting” practice could be extended to the other MS, and so, it could be used to evaluate the “status” of the sector and its capability to sustainable development.

7.4. Any other matters arising

Market concentration indicators

The working group noted that having only number of firms classified according to size classes does not describe concentration of production. Thus, the working group recommends to include in the variables requested by the regulation data on market concentration of the sector. This new data requested would be the turnover by company. It could be information on all enterprises and their individual turnover in order to calculate e.g. Herfindahl index, but it is more likely that most countries are only able to present the turnover of their biggest companies. With this information Concentration Ratio (CR) could be calculated. If it should be CR₄ or CR₈ or any other is an open question.

⁴ http://madb.europa.eu/mkacadb2/statistical_form.htm#

- CR4: Four-Firm Concentration Ratio: It measures the total market share of the four largest firms in an industry.
- CR8: Eight-Firm Concentration Ratio: It measures the total market share of the eight largest firms in an industry.

Since it could be against the EU statistical confidentiality law to provide this information by firm, it could be possible to directly request for such an indicator in the regulation.

The group realised that ideally the size group should be used as a segmentation criteria. But important data could be lost because the EU statistical confidentiality law and the low number of companies in some segments for some MS. This should be further discussed when revising the DCF.

Spatial concentration

The working group discussed the issue of spatial concentration of the enterprises to be part of the national chapter. Currently this could be done only by experts with the respective knowledge of a countries aquaculture sector. But it was agreed to discuss this point and possible solutions during the renewable process of the regulation.

8. COMMON ISSUES

8.1. Review formulas of the indicators (real interest rate, ROI calculated from EBIT, financial versus economic performance)

The working group analysed the formulas of the indicators from the 2010 AER on the EU fishing fleet present on appendix 6 and the formulas of the indicators from the 2010 AER on the EU fish processing from section 8.1.3.

EWG 11-03 recommends the following:

Fishing fleet indicators:

- Opportunity costs: following the STECF recommendations of its spring 2010 plenary⁵ the formula of interests/opportunity costs should be amended. Fishing rights should not be taken into account in the total amount of the capital value.
- Return on Investment (ROI) and Return on Fixed Tangible Assets (ROFTA) has to produce the same results for both the DCR and DCF. Specifically, EWG 11-03 notes that the formula reported for DCR includes capital costs where it is not always known if they include only depreciation (capital costs in DCF) or both depreciation and interests. If capital costs include only depreciation hence ROI and ROFTA have a different meaning. In the first case it is equal to GCF/Investment, in the second case it will be EBIT/Capital value. In case of non comparability this should be noted in the report.
- Real interest rate: the formula used in AER 2010 calculates the real interest rate by deducting the inflation rate from the risk free bond rate at country level.

The formula used is:

$$r = i - \pi,$$

⁵ Text from the report: In addition, there is currently a misspecification in the formula used to calculate the total capital value for 2008, which in turn has an impact on the calculations of opportunity cost of capital, return on investment and profits. Specifically, the estimated asset value of fishing rights (such as quota) has been included in the total value of capital, whereas it should be excluded, so that only the estimated value of physical capital is used in the calculation of economic profit and profitability. STECF recommends that the JRC, in collaboration with MS national correspondents, amends these calculations and adjusts the results accordingly before the report is published.

where i is the interest rate and π is the inflation rate, is a commonly used approximation of the Fisher formula:

$$1 + i = (1 + r)(1 + \pi)$$

It would be probably better to be more precise and calculate the real interest rate by the following formula:

$$r = [(1 + i)/(1 + \pi)] - 1.$$

Fish processing indicators:

- Operating Cash Flow (OCF): the formula on section 8.1.3 for the DCR is not correct, since depreciation should not be deducted.

8.2. Imputed value of unpaid labour (define methodologies, inclusion in the formulas, use Eurostat data as proxy)

The group recognised that considering imputed value of unpaid labour is important in comparing the economic performance of the sectors. In general, imputed labour costs are related to self employment. Self employment is common in small scale firms. But also in larger firms owner's wage may not be paid. Therefore, estimation of unpaid labor is important in small scale fisheries and aquaculture, but it should be considered in processing too. Even though the imputed value of unpaid labour could be minimal for the processing sector of most EU countries composed by big companies; for other EU countries, with smaller companies, it can be relevant. Thus, the group recommends that in order to guarantee the comparability between the three sectors (and their reports) the imputed value of unpaid labour should be estimated, reported and used in the analysis for all sectors.

The group stated that the methodology for the estimation of unpaid labour costs should be described in the National programs. These methods will be examined in the DCF Workshop on Capital valuation and other variables in June. This workshop should define the best practices and methods for the estimation of the imputed value of unpaid labour.

Some countries did not provide unpaid labour data for the fish processing industry. In this case, and in order to preserve the comparability among countries and sectors, it was proposed that for the preparation of the annual report, Eurostat data on the number of unpaid labour could be used to estimate the imputed value of unpaid labour (by multiplying it by the average wage in that country sector). Considering that the working group did not achieve an agreement on this issue, that the proper estimation of the unpaid labour costs is a complicated issue and that this topic is going to be discussed

in a workshop in June, the working group suggests not deciding on this issue until the results of the workshop are known.

8.3. Any other matters arising

Including data tables from other sources

The EWG-11-03 recommends that the report should be based on the data available in the DCR and DCF. The group also considers that the national chapters should follow a homogenous structure and outlook. In case national experts want to include tables from other sources than the DCR and DCF, an agreement with the chairman should be reached. Furthermore, the data sources should be clearly specified.

Data issues

EWG 11-03 recommends that a future best practice for AERs drafting is to provide experts with formats and tables as soon as possible, possibly before the meeting where reports are expected to be written. The group recognises that some tasks can be better carried out by experts when having all the agreed tables and graphs in advance.

The group also recognises that this is highly influenced by the timing of data uploading by MSs especially when the data uploading happens very late after the deadline. Hence, the group recommends MSs to upload their data within the deadline.

The group also reminds Member States that a quality check of data is carried out before the meeting by the JRC services and therefore a strict observation of the deadline is very important.

The group also recommends JRC services to further check the computed formulas in relation to the calculation of the indicators.

Format, edit and language of the reports

Taking into account, that the reports on economic performance of fleet, fish processing and forthcoming report on aquaculture are of high importance and should be used as example of good practice of data use and analysis, the group discussed the necessity to improve format, edit and language of the reports. It is recommended that the JRC uses services of professional language editors and layout designers/reviewers before publishing the report.

9. APPENDIX I: AER ON THE EU FISHING FLEET: REGIONAL CHAPTER TEMPLATE

Regional overview

First, there should be presented Figure 5.1 on days at sea. Then, 2 pie charts side by side on value of landings and volume of landing (Figure 5.2 and 5.3). Figure 5.4 should also be included as it was in the last year's report.

Then, there should be 2 trend figures on the volume and value of the top 5 species, side by side (as figure 2.7 and 2.8 in the EU overview).

Regional fleet fishing activity

There should be 2 pie charts describing main segments on totals of the regions with the analysis.

Regional fleet economic performance

Economic indicators presented in Table XX should be commented in the text by fleet segments. Compare the results of economic performance per vessel between fleet segments when relevant. But Table XX should be placed in the Annex. A similar table should be prepared with the data aggregated by country.

Table XX: Fleet segment data by region

	Volume				Value				Days at sea				Ves sels	FTE	GVA	Profit	GVA/ FTE
	Tot	NS	BS	NA	Tot	NS	BS	NA	Tot	NS	BS	NA					
	No	%	%	%	No	%	%	%	No	%	%	%					
DNK 12-18																	
UK 12- 18																	
DEU 12-18																	
DNK 18-24																	
UK 18- 24																	

10. APPENDIX II: AER ON THE EU FISH PROCESSING SECTOR: NATIONAL CHAPTER TEMPLATE

1.1. National chapter fish processing industry

1.1.1. Overview of the sector

Minimum sets of information/comments (based on collected data):

- N° of company (legal status)
- Employment
- Volume/Value of the sector

Data that are not collected but could be discussed when available, or based on expert knowledge:

- Information on the geographic origin of the raw material (National/EU/non-EU) and wild catch/aquaculture, to link processing to fleet/aquaculture (recommendation, also recommended by STECF).
- Composition of the industry by main product segments in terms of value (type of product: fish fingers/fillets/canned products/smoked products, etc.).
- Information about the spatial dependency of a MS on particular species.
- Information on market concentration of the sector

1.1.2. Socio-Economic aspects

Section based on data that have been collected under the DCR/DCF:

- Description of structure of the sector (pie-chart about size of enterprises in the sector)
- Description of socio-economic aspects
- Additional relevant data that are not collected but available can also be used here

Figure 1.1: Size distribution of the YYYY fish processing industry

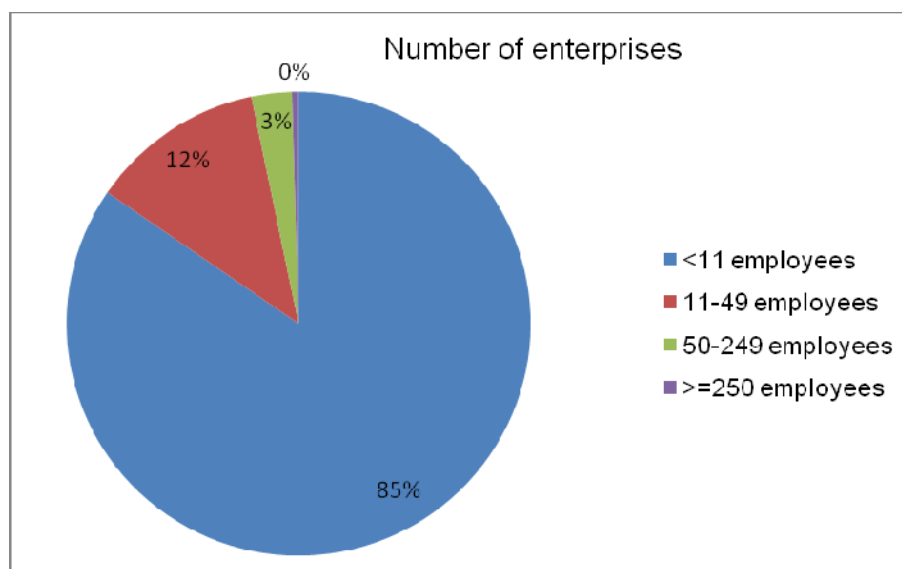


Table 1.1: Socio-economic performance indicators

Indicator	2006	2007	2008	2009
<i>Structural indicators</i>				
No of firms				
<i>Social indicators</i>				
Male employment				
Female employment				
Total employment				
FTE				
Salary per employee (FTE)				
Employment (FTE) per firm				
% of paid work				

Figure 1.2: Employment and average salary



1.1.3. Economic performance

Section based on data that have been collected under the DCF

- Description of economic performance
- Additional relevant data that are not collected but available can also be used here

Figure 1.3: Distribution of the operating costs in the YYYY fish processing industry

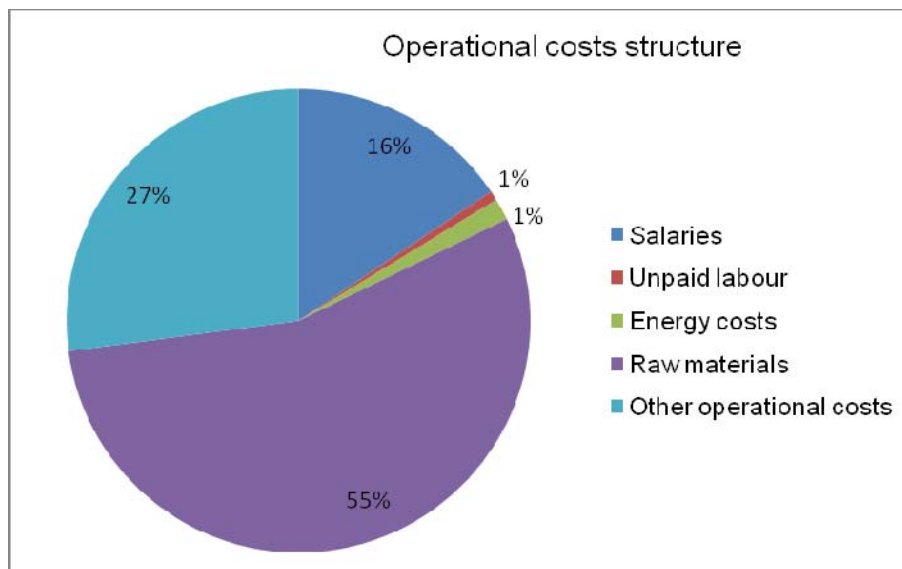


Table 1.2: Economic performance and productivity indicators

Indicator	2006	2007	2008	2009
<i>Economic Performance indicators</i>				
Turnover ('000 €)				
GVA ('000 €)				
OCF ('000 €)				
EBIT ('000 €)				
Net profit ('000 €)				
Return on Investment (in %)				
Financial position* (in %)				
<i>Productivity indicators</i>				
GVA per FTE (€)				
Running cost to turnover ratio (in %)				
GVA per capital value (€)				
(Net investment-Depreciation)/total capital				

1.1.4. Trends and triggers

This section is based on the expert knowledge of the author

- Comments on most important developments in the fish processing industry compared to previous years
- Information about developments that have occurred in the period between the current situation and the year when the data was collected
- Information about policy adjustments that could affect the social/economic performance of the processing industry

1.1.5. Data issues

- Data quality
- Data availability
- Confidentiality
- Input of expert about the differences between processing and trade. For some countries processing and trade is integrated, overestimation/underestimation.
- Differences with Eurostat

11. APPENDIX III: AER ON THE EU AQUACULTURE SECTOR: NATIONAL CHAPTER TEMPLATE

1.1. COUNTRY

1.1.1. Overview of the sector

Minimum sets of information/comments:

- N° of company (legal status)
- Employment
- Volume/Value of the sector
- Main segments (species/techniques).

Table 1.1: Economic Performance at national level

	2008	2009	Change 2009/2008 (%)
Turnover (1000)			
Volume (1000)			
N° of company			
FTE			
GVA			
EBIT			
ROI			
GVA/FTE			
GVA/Total assets			

- Comments and description of economic performance at national level and the development between 2009/2008.

Figure 1.1: Employment and average salary



1.1.2. Structure and economic performance of the sector's main segments

- Short introduction: Description of the sector, the number of segments and the most important species.

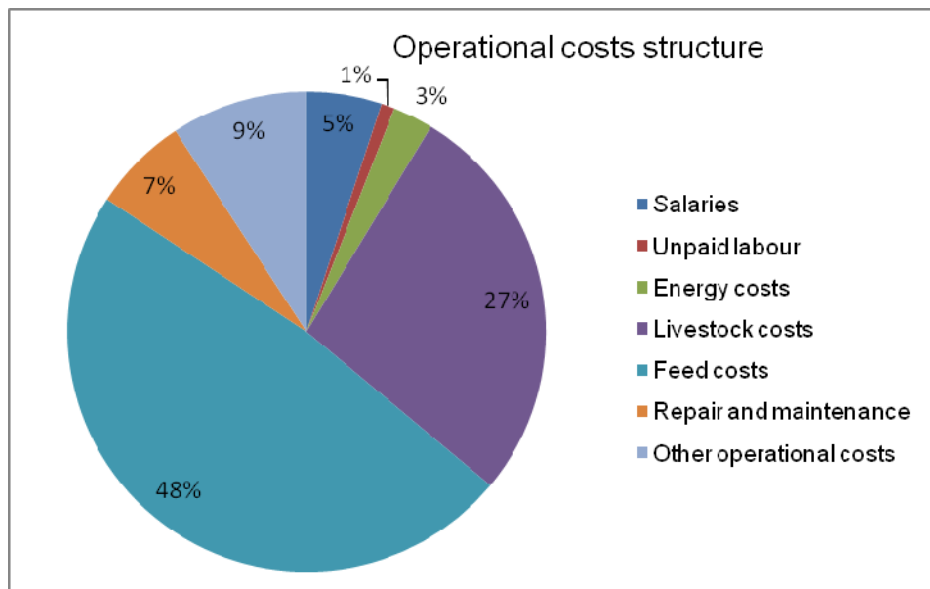
Table 1.1.2: Main segments and economic indicators

Techniques				
Species				
Environment*				
N° of farms				
Volume (1000)				
Turnover (1000)				
GVA				
EBIT				
ROI				
FTE				
GVA/FTE				
GVA/Total assets				
Running cost to turnover ratio (%)				

* Saltwater, Freshwater

- Comments on the economic indicators for main segments placed in table 1.1.2. (1/2 page for comments on each main segment)

Figure 1.2: Operational costs structure (for main segments)



1.1.3. Trends and triggers

- Specific interesting topics at the national level (regulation or other topics that have major influence).
- Issues of special interest (i.e.: new species, new techniques, others ...)
- Outlook for 2010 and 2011 (expected growth or decline, limits to future growth)

1.1.4. Data coverage and Data Quality

- Data quality
- Data availability
- Confidentiality
- Input of expert about the segmentation on enterprise level, the homogeneity of the segments in terms of techniques and species.
- Differences with other official data sources (Eurostat) on value and volume etc.

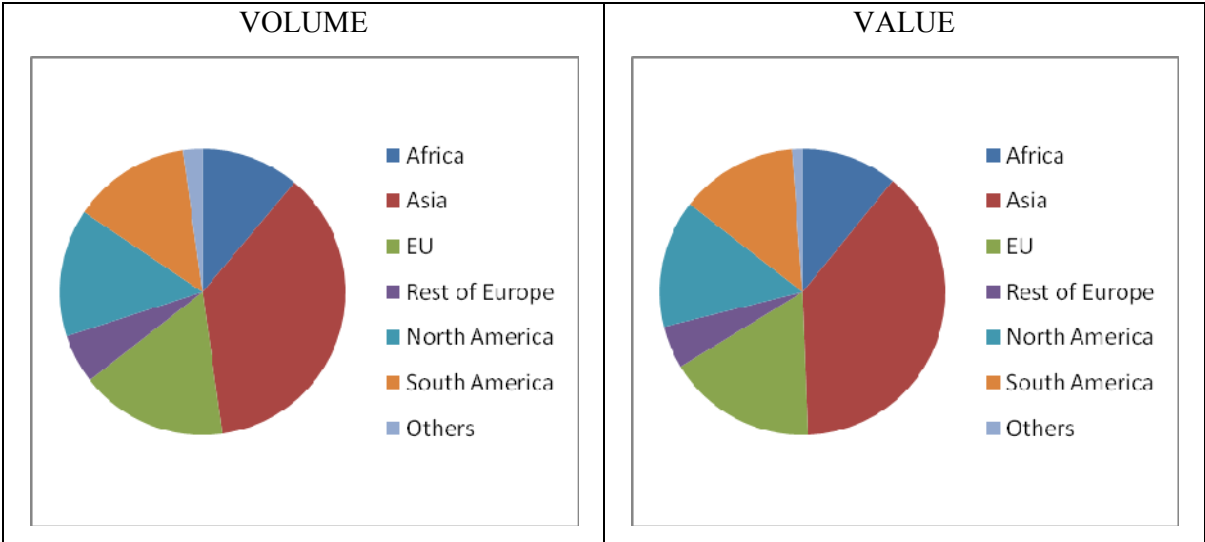
12. APPENDIX IV: AER ON THE EU AQUACULTURE SECTOR: EU OVERVIEW CHAPTER TEMPLATE

1. EU overview of the Aquaculture sector

Minimum sets of information/comments:

- Introduction

Figure 1.1: Aquaculture at Global Level (source: FAO)



At the EU level:

- N° of farms/company (legal status)
- Employment
- Volume/Value of the sector
- Other important issues on EU aquaculture sector (i.e. freshwater , ...etc.).

Figure 1.2: Aquaculture in EU per MS

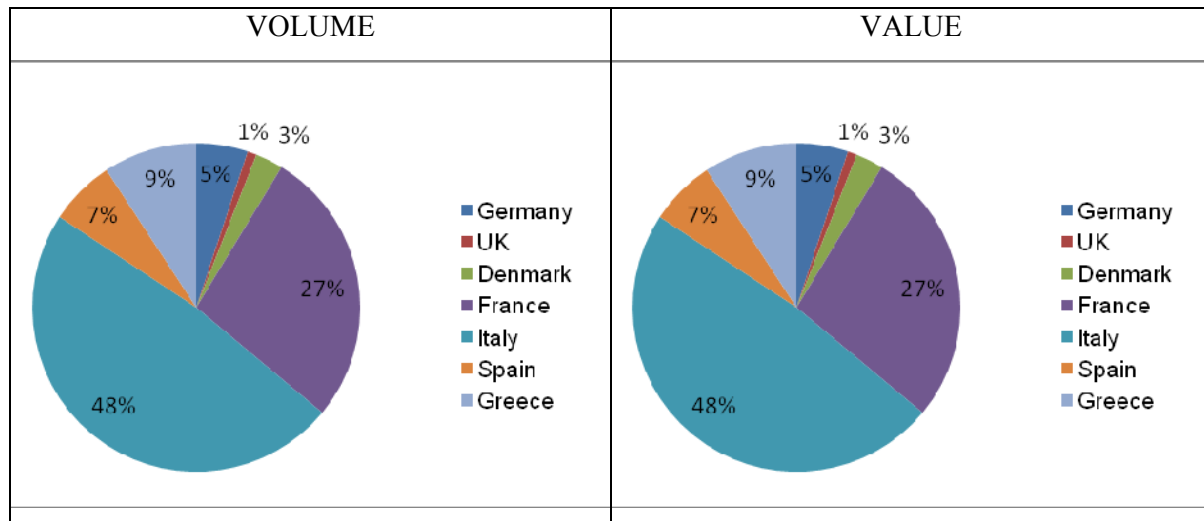


Table 1.1: Economic Indicators for the sector

	Number of Firms	FTE	Volume ('000 tons)	Turnover ('000 €)	GVA ('000 €)	EBIT	ROI	GVA/FTE ('000 €)	GVA/Total assets
Belgium									
Bulgaria									
Cyprus									
Denmark									
Estonia									
Finland									
France									
Germany									
Greece									
Ireland									
Italy									
Latvia									
Lithuania									
Malta									
Netherlands									
Poland									
Portugal									
Romania									
Slovenia									

Spain									
Sweden									
United Kingdom									
Total									

1.1. The Structure of the sector

- Introduction
- Description of the sector, the most representatives species divided by macro-categories (shellfish, salt and fresh water)
- Description of the performance for the macro-aggregates

Table 1.2: EU aquaculture aggregates

	Shellfish				Finfish: Saltwater				Finfish: Freshwater			
	N. of Firm s	FTE	Turn over ('000 €)	Volu me ('000 tons)	N. of Firm s	FTE	Turn over ('000 €)	Volu me ('000 tons)	N. of Firm s	FTE	Turn over ('000 €)	Volu me ('000 tons)
Belgium												
Bulgaria												
Cyprus												
Denmark												
Estonia												
Finland												
France												
Germany												
Greece												
Ireland												
Italy												
Latvia												
Lithuania												
Malta												
Netherlands												
Poland												
Portugal												

Romania												
Slovenia												
Spain												
Sweden												
United Kingdom												
Total												

- Describe the performance of the main segments and species (2-4 segments) at EU level.

1.2. Trends and triggers of the EU aquaculture sector

- Specific interesting topics at the EU level (regulation, governance, management, etc. that have major influence).
- Issues of special interest (i.e.: new species, new technique, consumers perception, safety and sanitary, pollution, others).
- Outlook for 2010 and 2011 (further?: limits to growth)

1.3. Data coverage and Data Quality

- Issues on segmentation (problems encountered: Example dividing freshwater aquaculture from saltwater aquaculture, or to use “combined” which is only referring to land based)
- Main problems in data assessments
- Data quality
- Data availability
- Confidentiality
- Input of expert about the segmentation on enterprise level, the homogeneity of the segments in terms of techniques and species.
- Differences with other official data sources (Eurostat) on value and volume etc.

13. EWG-11-03 LIST OF PARTICIPANTS

Name	Address	Telephone no.	Email
STECF members			
Malvarosa, Loretta	Irepa onlus via San Leonardo, trav. Migliaro 84131, Salerno. Italy	tel. +39 089 338978 fax +39 089 330835	malvarosa@irepa.org
Motova, Arina	European Regional Policy Institute, S. Konarskio str. 49 Vilnius LT-03123. Lithuania	+370 612 19519	arina.motova@erpi.lt

Name	Address	Telephone no.	Email
Invited experts			
Avdic, Edo	Fisheries Research Institute Župančičeva 9 Ljubljana 1000. Slovenia		edo.avdic@zzrs.si
Bengtsberg, Rickard	Swedish Board of Fisheries, Ekelundsgatan 1, PO Box 423, 40126, Gothenberg. Sweden	+46 31 7430358	rickard.bengtsberg@fiske.riverket.se
Berkenhagen, Jorg	VTI-Federal Research Institute for Rural Areas, Forestry and Fisheries Palmaille 9 Hamburg 22767. Germany	+49 040 38905-206	joerg.berkenhagen@vti.bund.de
Beukers, Rik	LEI Wageningen UR P.O. Box 29703 2502 The Hague The Netherlands	+3170 335 8372	rik.beukers@wur.nl
Calvo, Cristina,	University of Vigo. Dept. of Fisheries Economics Lagoas Marcosende Vigo, Spain	+34 986814072	cristina.calvo@uvigo.es
Cozzolino, Maria	Irepa onlus via San Leonardo, trav. Migliaro 84131, Salerno. Italy		cozzolino@irepa.org
Daviddjuka, Irina	Fish Resources Research Department, Daugavgrivas 8, LV-1048, RIGA, Latvia	+37 16 7617527	irina.davidjuka@bior.gov.lv
Ebeling, Michael	VTI-Federal Research Institute for Rural Areas, Forestry and Fisheries Palmaille 9 Hamburg 22767. Germany	+49 (0) 40 38905-186	michael.ebeling@vti.bund.de
Goti, Leyre			leyregoti@yahoo.com
Lees, Janek	Estonian Marine Institute 10a Mäealuse Street Tallinn1 2618. Estonia		janek.lees@ut.ee
Miguez, Maria Amelia	DG Pescas e Agricultura Av.Brasília Lisboa 1449-030. Portugal	+35 1213035888	amiguez@dgpa.min-agricultura.pt
Monios, Georgios	Fisheries Research Institute Nea Peramos 64007, Kavala. Greece		monios@inale.gr

Name	Address	Telephone no.	Email
Invited experts			
Moura, Carlos	DGPA Avenida Brasilia 1499-030 Lisboa. Portugal	+351 213 035 811	cmoura@dgpa.min-agricultura.pt
Nielsen, Rasmus	Institute of Food and Resource Economics University of Copenhagen Rolighedsvej 25 1958 Frederiksberg Denmark	+45 35 33 22 93	rn@foi.dk
Pokki, Heidi	Finnish Game and Fisheries Research Institute Viikinkaari 4 Helsinki FI-0079. Finland	+358 404871305	Heidi.Pokki@rktl.fi
Souffez, Arnaud	University of Nantes Chemin de la Censive du Tertre Nantes 44322. France	+33 240141738	arnaud.souffez@univ-nantes.fr
Stroie, Constantin	National Agency for Fisheries and Aquaculture, Carol I, no. 2-4, sector 3, Bucharest. Romania	+40 021 634 44 29	constantin.stroie@anpa.ro
Tzouramani, Irene	National Agricultural Research Foundation Terma Alkmanos str. 11528, Athens. Greece		tzouramani.inagrop@nagref.gr
Vassallo, Darcelle	Agriculture and Fisheries Regulation Department. Fort San Lucjan BBG 06. Marsaxlokk. Malta	+35 62229 3315	darcelle.vassallo@gov.mt
JRC Experts			
Guillen, Jordi (chair)	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (Varese). Italy	Tel.+390332785383 Fax +390332789658	jordi.guillen@jrc.ec.europa.eu
Virtanen, Jarno	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (Varese). Italy	Tel.+390332789614 Fax +390332789658	jarno.virtanen@jrc.ec.europa.eu

Name	Address	Telephone no.	Email
European Commission			
Virtanen, Jarno	Joint Research Centre (IPSC), STECF secretariat	Tel.+390332789614 Fax+390332789658	jarno.virtanen@jrc.ec.europa.eu
Calvo Santos, Angel Andres	DG Fisheries and maritime affairs	+32 229 93630	Angel-Andres.CALVOSANTOS@ec.europa.eu
Tritten, Christian	DG Fisheries and maritime affairs	+32 229 99509	Christian.TRITTEN@ec.europa.eu

European Commission

EUR 24828 EN – Joint Research Centre – Institute for the Protection and Security of the Citizen

Title: Scientific, Technical and Economic Committee for Fisheries. Methodologies for 2011 economic reports (STECF-11-03).

EWG-11-03 members: Guillen, J., Avdic, E., Bengtsberg, R., Berkenhagen, J., Beukers, R., Calvo, C., Cozzolino, M., Daviddjuka, I., Ebeling, M., Goti, L., Lees, J., Malvarosa, L., Miguez, M.A., Monios, G., Motova, A., Moura, C., Nielsen, R., Pokki, H., Souffez, A., Stroie, C., Tzouramani, I., Vassallo, D. & Virtanen, J.

STECF members: Casey, J., Abella, J. A., Andersen, J. L., Bailey, N., Bertignac, M., Cardinale, M., Curtis, H., Daskalov, G., Delaney, A., Döring, R., Garcia Rodriguez, M., Gascuel, D., Graham, N., Gustavsson, T., Jennings, S., Kenny, A., Kirkegaard, E., Kraak, S., Kuikka, S., Malvarosa, L., Martin, P., Motova, A., Murua, H., Nowakowski, P., Prellezo, R., Sala, A., Somarakis, S., Stransky, C., Theret, F., Ulrich, C., Vanhee, W. & Van Oostenbrugge, H.

Luxembourg: Publications Office of the European Union

2011 – 59 pp. – 21 x 29.7 cm

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

ISBN 978-92-79-20348-0

doi:10.2788/21518

Abstract

STECF's Expert Working Group 11-03 convened in Athens (28th March – 1st April, 2011) to discuss and seek agreement on the content, indicators, methodologies and format of the 2011 Annual Economic Reports (AER) on the EU fishing fleet, the fish processing and the aquaculture sectors.

Proposals for improved contents and the overall structure were discussed. Templates for the national and EU overview chapters for the EU the fish processing and the aquaculture sectors were produced. Indicators for the EU fishing fleet and fish processing reports were reviewed; new indicators for the fish processing and the aquaculture sector reports were proposed. And topics of special interest were proposed for all three reports.

How to obtain EU publications

Our priced publications are available from EU Bookshop (<http://bookshop.europa.eu>), where you can place an order with the sales agent of your choice.

The Publications Office has a worldwide network of sales agents. You can obtain their contact details by sending a fax to (352) 29 29-42758.

The mission of the JRC is to provide customer-driven scientific and technical support for the conception, development, implementation and monitoring of EU policies. As a service of the European Commission, the JRC functions as a reference centre of science and technology for the Union. Close to the policy-making process, it serves the common interest of the Member States, while being independent of special interests, whether private or national.

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



ISBN 978-92-79-20348-0

