European Commission

JRC SCIENTIFIC AND POLICY REPORTS

Scientific, Technical and Economic Committee for Fisheries (STECF)

Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (STECF-15-02)

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This report was reviewed by the STECF by written procedure in February 2015

Report EUR 27134 EN

Joint Research Centre

European Commission
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JRC Science Hub
https://ec.europa.eu/jrc

JRC 94933

EUR 27134 EN

ISBN 978-92-79-46169-9

ISSN 1831-9424

doi:10.2788/92692

Luxembourg: Publications Office of the European Union, 2015

How to cite this report:

Scientific, Technical and Economic Committee for Fisheries (STECF) – Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (STECF-15-02). 2015. Publications Office of the European Union, Luxembourg, EUR 27134 EN, JRC 94933, 147 pp.

Abstract

The Expert Working Group meetings of the Scientific, Technical and Economic Committee for Fisheries EWG-14-12 and EWG-14-21 on Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities were held on 27th – 31st October 2014 in Salerno, Italy and on 13th – 15th January 2015 in Ispra, Italy. The report was reviewed by the STECF by written procedure in February 2015.

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SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (STECF)

Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (STECF EWG -14-12 and STECF-EWG 14-21)

THE STECF REVIEW OF THE EWG -14-12 and EWG 14-21 REPORT WAS UNDERTAKED DURING FEBRUARY 2015 AND WAS ADOPTED BY THE COMMITTEE BY WRITTEN PROCEDURE ON 13 FEBRUARY 2015

Background

The Commission requests that an analysis of balance between fleet capacity and fishing opportunity be made using a standard approach across all EU fleet segments and based on DCF information. Where possible, evaluation should use data reference year 2009 to 2012 or 2013 if data are available. In 2012 the assessed fleet segments represented over 70% of the value of landings of the EU. The objective is to increase this percentage in the next few years.

Request to the STECF

Tasks to be performed:

1. *Consider technical, economic and biological indicators for analysis of balance between fleet capacity and fishing opportunity and comment on the balance or imbalance for the fleet segments provided.*

JRC will provide tabulated values (in the same format as the MS indicator tables in reports STECF-13-28 and STECF 14-09) for all indicators as detailed in items i) to vi) below, covering fleet segments making up at least 70% of the value of landings of the EU. The fleet segments assessed in the STCF 12-18 and STECF 13-28 reports should be among the selected fleet segments. If some of these 92 fleet segments are not part of the initial selection (70% of the value of landings of each MS), then those segments should be added to the initial selection. The EWG is requested to use these values where they are considered appropriate, or else to provide alternative values with explanation.

The following indicators are to be calculated and interpreted as defined in the 2014 guidelines:

(i) Sustainable harvest indicator (SHI)
(ii) Stocks at risk indicator (SAR)
(iii) Return on investment (ROI) / Return on Fixed Tangible Assets (RoFTA)
(iv) Ratio between current revenues and break-even revenue (CR/BER)
(v) The inactive fleet indicator
(vi) The vessel use indicator

For fleet segments for which the indicators can be calculated, STECF is requested to consider and evaluate the indicators and to make brief interpretative comments relating to the trend over the last 4-year period, the sustainability of the situation and the availability or reliability of data.

For fleet segments for which the indicators cannot be calculated, STECF is requested to identify the problem with the data.

2. Evaluate Member State's Reports

Evaluate the underpinning of the conclusions drawn in the national reports on the balance or imbalance for the identified fleet segments in the Member State's reports.

Specifically, Member States' reports should be scored according to the system for required elements detailed in sections 7.1 and 7.5, and table 7.1 of the report by SG-BRE10-01.
The results of the scoring exercise should be presented as in tables 7.2 and 7.3 of the report of SG-BRE 10-01. Updated versions of tables 7.4 and 7.5 should also be presented. Basic observations as given in the report of SG-BRE 10-01, sections 7.2, 7.3 and 7.4 on the content of the Member States' reports should also be provided.

3. Evaluate Member State's Action Plans

Assess the proposed measures in the action plans submitted by Member States, in the light of the adjustments required to eliminate the structural overcapacity as identified by the Member States in their reports based on the indicators that have been used.

STECF response

STECF reviewed the report of the EWG 14-12 and EWG 14-21 noted the considerable efforts made by Member States in preparing their national Reports and the efforts of the Expert groups to address the requests from the Commission. The Expert Group Report is comprehensive and provides a detailed commentary on Member States' National Reports and Action Plans and a critique on the suitability and utility of the indicators used by Member States in drawing conclusions on the balance between fleet capacity and fishing opportunities.

Based on the discussions and findings in the Report of the EWG 14-12 and 14-21, the STECF wishes to make the following observations and conclusions.

Observations and main findings

As Tasks 2 and 3 primarily relate to the STECF review of Member States' 2014 National Reports and Action plans in the context of the 2014 Guidelines, the STECF observations and conclusions with respect to these are given immediately below. The STECF response to Term of Reference 1 concerns the utility of the balance indicators and the associated 2014 Guidelines and suggestions for future additions and amendments and are therefore presented last.

TASK 2: *Evaluate the underpinning of the conclusions drawn in the national reports on the balance or imbalance for the identified fleet segments in the Member State's reports. Specifically, Member States' reports should be scored according to the system for required elements detailed in sections 7.1 and 7.5, and table 7.1 of the report by SG-BRE10-01.*

The results of the scoring exercise should be presented as in tables 7.2 and 7.3 of the report of SG-BRE 10-01. Updated versions of tables 7.4 and 7.5 should also be presented. Basic observations as given in the report of SG-BRE 10-01, sections 7.2, 7.3 and 7.4 on the content of the Member States' reports should also be provided.

Seventeen Member State reports were made available to EWG 14-12. The remaining six Member State reports were made available to EWG 14-21. Delays in receiving MS reports were due to late submissions by Member States, the time required to translate reports, and re-submissions of updated reports by some Member States.

- There was further overall improvement in the provision and quality of the required elements in MS reports relating to 2013 compared to reports relating to 2012.
- This is the sixth consecutive year in which the EWG has observed improvements in quality of completed elements relative to the previous year.
- Of the 23 MS assessed, 6 MS achieved scores of 100% for the quality of the required elements.
- EWG 14-12 concluded that there is a need to revise the scoring system developed by STECF in previous years to address the requirements of the new CFP in general, and the 2014 Balance Indicator Guidelines (including any relevant future revisions of the Balance Indicator Guidelines) in particular.

TASK 3: *Assess the proposed measures in the action plans submitted by Member States, in the light of the adjustments required to eliminate the structural overcapacity as identified by the Member States in their reports based on the indicators that have been used.*

- STECF EWGs 14-12 / 14-21 evaluated 6 Action Plans, specifically from Cyprus, Croatia, France, Italy, Latvia and Spain.
- The evaluation of Action Plans conducted by STECF EWGs 14-12 / 14-21 considered the following points:
    1. Consistency between fleet report and Action Plan;
    2. Presence of a discussion about the cause of imbalance;
    3. Examination of the adjustment targets;
    4. Specification of tools to reach the adjustment targets;
    5. Specification of a clear time frame.

STECF notes that EWG 14-21 has evaluated all the Action Plans and the key findings for each are presented below.

General Observations

- STECF notes that there are a number of generic issues that should be considered by the Commission in making an informed decision on whether MS Action plans are acceptable as the justification for adjusting fleet capacity via decommissioning

programmes. In particular, all six MS should provide clearer reasoning and logical argument regarding their choice of the capacity management measures proposed in their Action Plans. In cases where there is considerable uncertainty in stock status which has led to stock assessments being rejected by the relevant scientific bodies (STECF, ICES and GFCM), the biological indicator values will also be uncertain and consideration needs to be given as to whether it is appropriate to use them to identify fleet segments that require an Action Plan.

- As requested, STECF EWG 14-12 / 14-21 undertook its Action Plan evaluations against indicators estimated following the 2014 Balance Indicator Guidelines (COM (2014) 545 Final). However some of the indicators used to inform an assessment of the balance between fishing capacities and fishing opportunities can be misleading, especially the Sustainable Harvest Indicator. Consequently, if Member States' assessment of whether a fleet segment is out of balance with fishing opportunities was based primarily on the SHI, their assessments may be questionable and any associated action plan may be inappropriate or undesirable.

- STECF agrees with the Expert group proposal that it would be useful if additional guidelines for the preparation of action plans can be incorporated into the guidelines to Member States for the preparation of their annual reports.

Observations of Member States' Action plans

Cyprus

- Cyprus concluded that the polyvalent fleet (0-<12m) using passive gears was (in 2013) not in balance with its fishing opportunities. STECF notes that this conclusion was based on values of the SHI and RoFTA indicators. STECF notes that the rationale for concluding that the fleet segment is over capacity is clearly explained. While the timeframe for permanent cessation of fishing is provided, the rationale behind the conclusion that 30% of this segment should be scrapped is not explained. STECF is unable to assess if this percentage is appropriate or not. Furthermore, STECF notes that the target number of vessels to be decommissioned is unclear and further clarification is required.

Croatia

- Croatia concluded that four purse seine fleet segments and four demersal trawl segments were (in 2013) not in balance with fishing opportunities. STECF notes that this conclusion was based primarily on values of the biological indicators. STECF notes that the rationale for concluding that the fleet segment is over capacity is clearly explained. However STECF notes that the economic indicator (CR/BER) is positive for three of the segments. STECF notes that the rationale behind the planned scrapping of between 5% and 20% of the capacity of PS and DTS fleets VL 6-40 in terms of GT and kW is not explained and therefore STECF is unable to assess if the proposed percentage reductions are appropriate or not. Furthermore, STECF notes that the timeframes for implementation are unclear and it is also unclear whether fleet

capacity reductions will be achieved under the existing EFF OP or the EMFF. STECF considers that further clarification is required.

France

- France concluded that twelve fleet segments were not in balance with fishing opportunities in 2013. Six segments target European Eel and six segments operate on Posidonia beds. STECF notes that this conclusion was based solely on the SAR indicator for the segments targeting European eel whereas the justification for the fleets operating on Posidonia beds is the impact on the habitat rather than any specific stocks at risk *per se*. STECF therefore notes that the rationale for concluding that the fleet segments are over capacity relative to their fishing opportunities is not explained for the latter fleet segments. STECF also notes that the rationale, in terms of GT and kW, behind the planned scrapping of 212 vessels is not explained and therefore STECF is unable to assess if the number of vessels is appropriate or not. STECF notes that the timeframes for implementation are unclear and considers that further clarification is required. The French Action Plan also identifies an additional set of fleet segments which, according to their assessment, need to be monitored with respect to the balance between capacity and fishing opportunities. STECF notes that Member States are required to report annually on all fleet segments and not simply those specified in Member States' Action plans.

Italy

- Italy concluded that three fleet segments were not in balance with fishing opportunities. STECF notes that this conclusion was based primarily on the SHI biological indicators. STECF notes that the rationale for concluding that the fleet segment is over capacity is not clearly explained in that it does not elaborate on the proposed 2% reduction in GT's nor specify the number of vessels involved or the adjustment tools and targets. STECF is unable to assess if the proposed percentage reductions are appropriate or not. Furthermore, SETCF notes that the timeframes for implementation are unclear. STECF considers that further clarification on the above points is required.

Latvia

- Latvia concluded that the gill net fleet segment, which almost exclusively targets Baltic Cod (VL 24-40m), is not in balance with fishing opportunities and that the entire fleet segment comprising of 5 vessels should be scrapped. STECF notes that this conclusion was based primarily on the biological indicators (SHI). STECF notes that the rationale for concluding that the fleet segment is over capacity is clearly explained. However, STECF notes that there is substantial uncertainly in the assessment of Baltic Cod which has recently been rejected by ICES as the basis of advice. STECF notes that basing conclusions on over capacity on an unstable stock assessment may lead to incorrect inferences being drawn. STECF is unable to determine whether the removal of the entire fleet segment would improve the balance situation or not.

Spain

- An Action Plan was presented by Spain that included detailed information about, and analysis of, biological, economic, technical and social indicators. However no formal decommissioning programme was proposed in the Action Plan to bring the identified fleet segments into balance with their fishing opportunities. STECF notes that Information was lacking on targets and timeframes. Given that no actual action has been proposed, STECF has no further comment.

Task **1:** *Consider technical, economic and biological indicators for analysis of balance between fleet capacity and fishing opportunity and comment on the balance or imbalance for the fleet segments provided.*

General observations on assessment of balance

STECF agrees with the Expert group report that assessing whether a fleet segment is in or out of balance with fishing opportunities is not simply a technical or scientific issue. Such an assessment also requires consideration of the social and economic aspects and objectives of the fishery management policy. Furthermore, judging whether a fleet segment is in or out of balance with the available fishing opportunities is ultimately a judgement for the Commission and the Member State concerned. By definition, the role of indicators as a basis to determine whether a given fleet is in or out of balance is a matter of judgement for fisheries managers depending on their priorities. STECF reiterates its previous advice that no single indicator can be considered to be evidence of over capacity or imbalance and that indicators cannot provide an unequivocal measure of whether a fleet is in or out of balance with its fishing opportunities. Such indicators should only serve as a prompt to Member States to further investigate the relevant fleet segments. The values and weighting for *all* available indicators should be considered when assessing whether the capacity of a fleet segment might, in the years represented, have been out of balance with fishing opportunities.

STECF also considers that concluding an imbalance in the recent past does not necessarily imply the existence of imbalance in current or near future years. When considering future possible actions, MS should consider the possibility that both fleet capacity and the fishing opportunities are likely to have changed since the data were collected. Initial studies have shown that the introduction of the Landing Obligation is likely to have a negative impact on the economic performance of some fleet segments. STECF notes that the use of indicators which are based on period *prior* to the introduction of the landing obligation as the basis for future Action Plans may not be appropriate. In particular, if discard plans are implemented as intended, over-reliance on quotas that are likely to "choke" fishing activity, will alter the economic viability of individual vessels and fleet segments considerably.

Member States' assessment of balance.

STECF notes that 18 of the 23 Member States' National reports conclude that one or more fleet segments were not in balance with fishing opportunities. In some cases, such conclusions appear to be based on the values for only a single indicator or a sub-set of the

indicators listed in the 2014 Guidelines. It is difficult to understand how such conclusions have been reached using the segment-specific indicator values alone. STECF considers that conclusions as to whether the capacity of a particular fleet segment is in, or out of balance with fishing opportunities cannot reliably be supported without ancillary information. In order to evaluate whether a Member States' assessment of balance is justified, there is a clear need to have the overall rationale behind the conclusion and not just the segment–specific indicator values. In short, the indicators alone do not provide an objective measure of whether a fleet segment is in or out of balance with its fishing opportunities.

It is possible for example, that for individual fleet segments, the economic and biological indicators will give opposing signals. A fleet segment may be deemed to be economically in balance if the economic indicators signal a positive economic performance, even if such a fleet segment is to some extent reliant on stocks that are being exploited at rates that are not consistent with those capable of producing MSY. Such a situation is highly plausible as stock status is fundamental to the calculation of the biological indicators but it is the overall exploitation rate on a stock generated by all fleet segments that determines the status of that stock and not the exploitation rate of an individual fleet segment.

STECF comments on indicators used

STECF also notes that the utility and reliability of the indicator values are currently compromised through a deficit of appropriate segment-specific data. For example, where fleet segments exploit stocks for which there is no analytical assessment, it is not possible to generate biological indicators. Conversely, where stocks have full analytical assessments, indicators can be calculated meaning that fleet segments for which biological indicators are available can potentially be identified as being out of balance whereas no conclusions can be draw about other segments despite their potential to have more substantial balance issues in practice. Based on the data received, it is possible that some MS may have overlooked or were unable to identify some fleet segments that are candidates for further investigation as to whether they could be considered out of balance with available fishing opportunities.

STECF concludes that the indicators, while useful, have a number of limitations that must be considered when judging whether a fleet segment is in or out of balance with the fishing opportunities available to it. The sustainable harvest indicator (SHI) could potentially identify fleet segments that could be considered out of balance (i.e. SHI >1) despite the fact that they may only have a minor contribution to catches of stocks where F > Fmsy. Conversely, other segments could be considered as being in balance yet they make a *greater* contribution to the overall fishing mortality. This is due to the latter fleet having a broader diversity in catches of other stocks where F<Fmsy. As such, STECF notes that a SHI value greater than one, only indicates a fleets reliance on stocks that are over exploited, not how much they contribute to the overall fishing mortality, which may be of more interest to managers. Consequently, Member State may base an Action Plan to reduce the capacity of particular fleet segment on the basis of the SHI value, even though that fleet segment catches only a small proportion of a stock or stocks that is/are being exploited at rates greater than F_{msy}. STECF therefore proposes two indicators that could be used in conjunction with the existing SHI and SAR

indicators; an indicator of the number of overharvested stocks which is weighted by the relative contribution and individual fleet segment made to the total fishing mortality; and the Economic Dependency Indicator, which shows how economically reliant fleet segments were on overfished stocks.

Future Reporting on Balance

The STECF conclusions with respect to Term of Reference 1 primarily relate to a critique of the suitability and utility of the indices specified in the 2014 guidelines and suggestions for alternative and additional indices that may prove helpful to Member States in preparing future National Reports. While noting that the EWG Report has drafted proposals to amend the 2014 Guidelines to be in keeping with its suggestions for alternative and additional indicators, the possibility for Member States to utilise alternative or additional indicators to those listed in the 2014 Guidelines is already provided for. Furthermore, in spite of their limitations, each of the indicators described in the 2014 Guidelines has at least some merit in its ability to assist Member States in assessing the balance between fleet capacity and fishing opportunities, provided that Member States realise such limitations and interpret the indicator values accordingly. Hence, there may be no immediate need to replace the 2014 Guidelines and given that the list of indicators used by Member States is likely to evolve, especially as the provisions of the 2013 CFP are implemented. STECF therefore suggests that the proposed draft Guidelines presented in Annex IV of the Expert Group report be considered at a future date if and when it becomes necessary to devise a new set of Guidelines. Any future revisions should include precise details on how the indicators should be calculated. Member States should also be encouraged to check and validate their calculated indicator values and provide sufficient data and clarity of process in their National reports to enable the calculation of all indicators to be replicated.

REPORT TO THE STECF

EXPERT WORKING GROUP ON
Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities
(EWG-14-12 and EWG-14-21)

EWG-14-12: Salerno, Italy, 27-31 October 2014
EWG-14-21: Ispra, Italy, 13-15 January 2015

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

EXECUTIVE SUMMARY

OVERVIEW OF THE WORK UNDERTAKEN

TOR 1: *Consider technical, economic and biological indicators for analysis of balance between fleet capacity and fishing opportunity and comment on the balance or imbalance for the fleet segments provided.*

A group of eleven experts, five biologists and six economists, worked together to address this TOR during EWG 14-12. The work was finalised by a group of two economists and three biologists at EWG 14-21. Values for indicators in MS summary tables, for the period 2008-2012/2013 and divided by fishing area and individual fleet segments, were provided to experts at the start of the meeting. The tables provided included (i) the actual values for the sustainable harvest, stocks at risk, return on investment and return on fixed tangible assets, ratio between current revenues and break-even revenues, inactive fleet and vessel use indicators, and (ii) additional information where relevant to facilitate the interpretation of indicator values by experts.

In order to deal with all the indicators calculated per fleet segments experts split into smaller sub-groups which always included at least one biologist and one economist. Experts did not try to assess fleet segments from their own MS. Whilst interpreting and commenting on indicator trends experts encountered several issues related to the reliability of indicator calculations, and problems related to difficulties in combining biological and economic data at fleet segment level. The latter was mainly due to problems with clustered economic data, which is not available at the same level disaggregation as biological data and in many cases is clustered inconsistently over time.

EWGs 14-12 / 14-21 focused additional effort on evaluating the quality and reliability of the sustainable harvest indicator (SHI) and the stocks at risk indicator (SAR). Both experts which had provided the SHI and SAR indicator values through an ad hoc contract, and new experts which had never worked on these indicators before reviewed indicator calculations and discussed indicator properties. Although time was limited and the group could not fully evaluate the indicators or carry out a full sensitivity analysis as suggested by STECF Plenary 13-01, the group was able to highlight a number of issues affecting the calculation of these indicators together.

Inconsistencies and problems relating to the calculation of indicator values outlined by MS in their annual fleet reports as well as the 2014 Balance Indicator Guidelines (COM (2014) 545 Final) were reviewed by EWG 14-21. In order to address the inconsistencies and misleading statements identified by EWG 14-21 in the Balance Indicator Guidelines, a new version of the guidelines and a proposal for new biological and economic indicators were drafted.

Due to the large number of issues and problems identified with the existing balance indicators, the Expert Group considered that it would be inappropriate to draw any conclusions for the SHI and SAR indicator as requested under TOR 1. EWGs 14-12 / 14-21 were thus unable to fully address TOR1.

TOR 2: *Evaluate the underpinning of the conclusions drawn in the national reports on the balance or imbalance for the identified fleet segments in the Member State's reports.*

A group of seven experts, five economists and two biologists, worked on the evaluation of 17 MS fleet reports during EWG 14-12. A group of six experts, three economists and three biologists worked on the evaluation of the remaining 6 MS fleet reports during EWG 14-21. The experts assessed compliance with Article 22 of Regulation 1380/2013, as well as Articles 13 and 14 of Regulation 1013/2010 by using the scoring system that had been developed during SGBRE 09-01 and evolutions of the system up to EWG 12-11 (Report STECF-12-18). The experts also completed the time series of assessment scores for all MS reports. EWGs 14-12 / 14-21 were able to fully address TOR2.

In addition to evaluating the national reports as requested by TOR 2 the group discussed the need to update the scoring system developed by STECF in previous years to better address the requirements of the new CFP in general, and the 2014 Balance Indicator Guidelines (including any relevant future revisions of the Balance Indicator Guidelines) in particular. Only limited time was devoted to this aspect since it was not part of the meeting TOR as such.

TOR 3: *Assess the proposed measures in the action plans submitted by Member States, in the light of the adjustments required to eliminate the structural overcapacity as identified by the Member States in their reports based on the indicators that have been used.*

A group of five experts, three economists and two biologists, evaluated Action Plans submitted by Member States for fleet segments with identified structural overcapacity in line with Article 22.4 of Regulation (EU) 1380/2013 during EWG 14-12. A group of seven experts, three biologists, three economists and one lawyer continued with the evaluation of Member State Action Plans during EWG 14-21. Prior to beginning the assessment of the Action Plans during EWG 14-12, the experts discussed the approach to be taken as a group, and identified a series of aspects to be taken into account when evaluating measures being proposed by MS. EWGs 14-12 and 14-21 were able to fully address TOR3.

SUMMARY OF THE MAIN FINDINGS

TOR 1: *Consider technical, economic and biological indicators for analysis of balance between fleet capacity and fishing opportunity and comment on the balance or imbalance for the fleet segments provided.*

- Assessing whether a fleet segment is in or out of balance with fishing opportunities is not simply a technical or scientific issue. Such an assessment also requires consideration of the social and economic aspects and objectives of the fishery management policy.
- Even if all indicators are calculated for a fleet segment, a conclusion cannot unequivocally be drawn on the balance between fishing opportunity and fleet capacity for a fleet segment based only on their values. The indicator values should serve to prompt Member States to further investigate the relevant fleet segment.

- By definition, the role of indicators as a basis to determine whether a given fleet is in or out of balance is a matter of judgement for fisheries managers depending on their priorities. EWG 14-21 reiterates previous STECF advice that no single indicator can be considered to be evidence of over capacity or imbalance. The values and weighting for *all* available indicators should be considered when assessing whether the capacity of a fleet segment might, in the years represented, have been out of balance with fishing opportunities.
- An assessment concluding an imbalance in the recent past, does not necessarily imply the existence of imbalance in current or near future years. When considering future actions, MS should consider the possibility that both the fleet capacity and the fishing opportunity are likely to have changed since the data were collected.
- The utility and reliability of the indicator values are currently compromised through a deficit of appropriate fleet segment-specific data and would be improved if in future, Member States gave priority to providing more comprehensive datasets with higher coverage, and efforts to carry out stock assessments were increased.
- The use of the Sustainable Harvest Indicator (SHI) to assess whether a fleet is out of balance with available fishing opportunities may be misleading and give rise to inappropriate or ineffective decisions.
- Member State may propose an Action Plan to reduce the capacity of particular fleet segment on the basis of the SHI value, even though that fleet segment catches only a small proportion of a stock or stocks that is/are being exploited at rates greater than F_{MSY}. Conversely, a fleet with a much greater catch of the stocks of concern, may be considered in balance simply because it has a broader catch profile of other species.
- As an alternative, the EWG proposes that the SHI should be discarded and replaced with two alternative indicators:
    - An indicator for the Number of Overharvested Stocks (NOS);
    - An Economic Dependency Indicator (EDI).
- The methodology used to calculate the SAR indicator should be revised and the indicator should be renamed Number of Stocks at Risk (NSR).
- Based on the data received, it is possible that some MS may have overlooked or were unable to identify some fleet segments that are candidates for further investigation as to whether they could be considered out of balance with available fishing opportunities.
- The introduction of the Landing Obligation will potentially give rise to significantly different indicator values than those given in the 2014 Reports and Action Plans implemented by Member States prior to its implementation, may no longer be appropriate. In particular, if discard plans are implemented as intended, overreliance on TACs that are likely to "choke" fishing activity, will alter the economic viability of individual vessels/fleet segments considerably.
- The 2014 Balance Indicator Guidelines issued to Member States presently are ambiguous in a number of places and the Commission could consider the adoption and dissemination of new guidelines. To assist, EWG 14-21 has provided suggestions that may help in this process. The Expert group suggests that the STECF commends the draft revised guidelines to the Commission for dissemination to Member States.
- Precise details of how indicators are to be calculated will need to be included in these guidelines following a decision by DG MARE on which of the proposed indicators

are to be adopted and included in the Reports from Member States on the balance between capacity and fishing opportunities. Member States should also be encouraged to check and validate estimates and be provided with sufficient data and clarity of process to replicate the calculation of all indicators.

TOR 2: *Evaluate the underpinning of the conclusions drawn in the national reports on the balance or imbalance for the identified fleet segments in the Member State's reports.*

- Seventeen Member State reports were made available to EWG 14-12. The remaining six Member State reports were made available to EWG 14-21. Delays in receiving MS reports were due to late submissions by Member States, the time required to translate reports, and re-submissions of updated reports by some Member States.
- There was further overall improvement in the provision and quality of the required elements in MS reports in 2013 compared to 2012.
- This is the sixth consecutive year in which the EWG has observed improvements in quality of completed elements relative to the previous year.
- Of the 23 MS assessed, 6 MS achieved scores of 100% for the quality of the required elements, which is an improvement on scores obtained in 2012.
- EWG 14-12 discussed the need to revise the scoring system developed by STECF in previous years to address the requirements of the new CFP in general, and to be in line with the provisions of the 2014 Balance Indicator Guidelines (including any relevant future revisions of the guidelines) in particular.

TOR 3: *Assess the proposed measures in the action plans submitted by Member States, in the light of the adjustments required to eliminate the structural overcapacity as identified by the Member States in their reports based on the indicators that have been used.*

- STECF EWGs 14-12 / 14-21 evaluated 6 Action Plans, specifically from Cyprus, Croatia, France, Italy, Latvia and Spain.
- The evaluation of Action Plans conducted by STECF EWGs 14-12 / 14-21 considered the following points:
    1. Consistency between fleet report and Action Plan;
    2. Presence of a discussion about the cause of imbalance;
    3. Examination of the adjustment targets;
    4. Specification of tools to reach the adjustment targets;
    5. Specification of a clear time frame.
- There were unresolved issues with respect to all the Action Plans reviewed. Clarification of the issues identified is desirable in order to take an informed decision on the suitability of the proposed Action Plans. In particular, the rationale for the choice of the capacity management measures proposed by all six Member States and the associated targets require further elaboration and clarification.
- In the case of considerable uncertainty in the evaluation of stock status which has led to stock assessments being rejected by the appropriate scientific bodies such as STECF, ICES and GFCM, the biological indicators will also be uncertain and consideration needs to be given as to whether it is appropriate to use them in identifying fleet segments that require an Action Plan.

- When a multi-annual management plan is already in place at EU level, coherence and consistency of management measures under the Action Plan with existing measures under the multi-annual management plan should be ensured.
- STECF EWG 14-12 / 14-21 undertook its Action Plan evaluations against the 2014 Balance Indicator Guidelines (COM (2014) 545 Final). However the 2014 guidelines are in need of revision, and some of the indicators used to inform an assessment of the balance between fishing capacities and fishing opportunities should be replaced. The Sustainable Harvest Indicator in particular is problematic and may be misleading. As a result, if Member States' assessments of whether a fleet segment is out of balance with fishing opportunities was based on the SHI, their assessments may be questionable and any associated action plan may be inappropriate or undesirable.
- Additional guidelines for the preparation of Action Plans should be incorporated into future guidelines to Member States for the preparation of their annual fleet reports.

1 INTRODUCTION

Expert working groups EWG-14-12 / 14-21 were convened under STECF to assess balance indicators for key fleet segments, review national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities, and assess Action Plans submitted for fleet segments where Member States identified structural overcapacity. EWG-14-12 was held in Salerno, Italy from the 27 – 31 October 2014; EWG-14-21 was held in Ispra, Italy from the 13 – 15 January 2015.

Independently calculated balance indicators, based on DCF economic data and stock assessment information were provided to experts, and the evaluation of these balance indicators is reported here. Member State fleet capacity reports were assessed by using the scoring system developed and applied in previous STECF EWGs. Fleet segment Action Plans submitted by Member States for fleet segments with identified structural overcapacity as identified by the Member States in their reports in line with Article 22.4 of Regulation (EU) 1380/2013 were evaluated for the first time.

1.1 Terms of Reference for EWG-14-12

The following terms of reference were agreed by DG Maritime Affairs and Fisheries (DG-MARE) and the chair of the expert working group:

Background

The Commission requests that an analysis of balance between fleet capacity and fishing opportunity be made using a standard approach across all EU fleet segments and based on DCF information. Where possible, evaluation should use data reference year 2009 to 2012 or 2013 if data are available. In 2012 the assessed fleet segments represented over 70% of the value of landings of the EU. The objective is to increase this percentage in the next few years.

Tasks to be performed:

1. Consider technical, economic and biological indicators for analysis of balance between fleet capacity and fishing opportunity and comment on the balance or imbalance for the fleet segments provided.

JRC will provide tabulated values (in the same format as the MS indicator tables in reports STECF-13-28 and STECF 14-09) for all indicators as detailed in items i) to vi) below, covering fleet segments making up at least 70% of the value of landings of the EU. The fleet segments assessed in the STCF 12-18 and STECF 13-28 reports should be among the selected fleet segments. If some of these 92 fleet segments are not part of the initial selection (70% of the value of landings of each MS), then those segments should be added to the initial selection. The EWG is requested to use these values where they are considered appropriate, or else to provide alternative values with explanation.

The following indicators are to be calculated and interpreted as defined in the 2014 guidelines:

(i) Sustainable harvest indicator (SHI)

(ii) Stocks at risk indicator (SAR)
(iii) Return on investment (ROI) / Return on Fixed Tangible Assets (RoFTA)
(iv) Ratio between current revenues and break-even revenue (CR/BER)
(v) The inactive fleet indicator
(vi) The vessel use indicator

For fleet segments for which the indicators can be calculated, STECF is requested to consider and evaluate the indicators and to make brief interpretative comments relating to the trend over the last 4-year period, the sustainability of the situation and the availability or reliability of data.

For fleet segments for which the indicators cannot be calculated, STECF is requested to identify the problem with the data.

2. Evaluate Member State's Reports

Evaluate the underpinning of the conclusions drawn in the national reports on the balance or imbalance for the identified fleet segments in the Member State's reports.

Specifically, Member States' reports should be scored according to the system for required elements detailed in sections 7.1 and 7.5, and table 7.1 of the report by SG-BRE10-01.
The results of the scoring exercise should be presented as in tables 7.2 and 7.3 of the report of SG-BRE 10-01. Updated versions of tables 7.4 and 7.5 should also be presented. Basic observations as given in the report of SG-BRE 10-01, sections 7.2, 7.3 and 7.4 on the content of the Member States' reports should also be provided.

3. Evaluate Member State's Action Plans

Assess the proposed measures in the action plans submitted by Member States, in the light of the adjustments required to eliminate the structural overcapacity as identified by the Member States in their reports based on the indicators that have been used.

2 TOR 1 ASSESSMENT OF BALANCE INDICATORS

2.1 Background

All indicators provided and used in the STECF EWGs 14-12 / 14-21 were calculated, as closely as possible, according to the 2014 Balance Indicator Guidelines[1]. The Commission's 2014 Balance Indicator Guidelines seek to provide a common approach for estimating the balance over time between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy.

2.2 Provision, Quality and Reliability of Indicator Values

JRC produced a first set of technical, social and economic indicators in April. STECF EWG 14-04 (AER meeting part 1) was requested to quality check, analyse and summarise these three types of balance indicators for the period 2008-2012/13. These indicators, as well as the two biological indicators, derived through two *ad hoc* contracts, were submitted to the STECF in May for review and subsequently adopted by written procedure in May (see STECF 14-09_Balance Indicators). The report and data files were made available on the STECF webpage[2].

Due to DCF data resubmissions by several Member States during and after STECF EWG 14-05 (AER meeting part 2), all balance indicators were re-estimated by JRC and *ad hoc* contractors using the latest data available (last submission: 19/09/2014). These re-estimated indicators were not presented to STECF prior to being used by EWG 14-12.

A revised table prepared by the JRC containing all the balance indicators by MS and fleet segment (supra-region[3] + fishing technology + vessel length) was provided to EWG 14-12 at the start of the meeting. The data were provided for each year over the period 2008-2013 (2012 for economic indicators).

Table 2.1 lists the set of balance indicators along with some additional information.

[1] Communication from the Commission to the European Parliament and the Council – Guidelines for the analysis of the balance between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy COM(2014) 545 final.

[2] http://stecf.jrc.ec.europa.eu/reports/balance

[3] The DCF supra-regions are: (1) Area 27 = Baltic Sea, North Sea, Eastern Arctic, North Atlantic; (2) Area 37 = Mediterranean Sea and Black Sea; (3) OFR = Other Fishing Regions.

Table 2.1 Indicators provided to experts at the start of EWG 14-12

Indicator		Calculated by:	Comments
Biological indicators	**SHI** Sustainable Harvest Indicator	Dr Jerome Guitton	1. Provided via an *ad hoc* contract. 2. Calculated by landings value for 2008-2012 for every EU fleet segment in Area 27 for which data were available. Calculated by landings weight for 2012 for every EU fleet segment in Area 27 for which data were available. 3. Calculated by landings weight and landings value for 2012 for every EU fleet segment in Area 37 for which data were available. Stock assessment parameters prior to 2012 are not readily available for Area 37 since there is no database with data on time series of $F_{current}$ (mean F) and F_{MSY} for fish stocks found in Area 37. 4. Preliminary indicator values for landings value for 2013 were provided wherever possible. 5. Fleet segments were highlighted when less than 40% of the annual value of landings came from assessed stocks.
	SAR Stocks At Risk Indicator	Dr Armelle Jung	1. Provided via an *ad hoc* contract. 2. Calculated for 2008-2012 for all fleet segments for which data were available. 3. Preliminary indicator values for 2013 were provided wherever possible.
Economic indicators	**ROI or RoFTA** The Return on Investment (ROI) or Return on Fixed Tangible Assets (RoFTA)	JRC	1. Calculated using the same principle as STECF EWG 13-11; the target reference value to which the indicator value is compared is the risk-free interest rate. 2. Calculated for years 2008-2012, the most recent year for which DCF economic data are available. 3. 2013 economic data will not be available until 2014 under the DCF. 4. The same clustering approach adopted for the CR/BER was adopted.
	CR / BER Current revenue as proportion of break-even revenue	JRC	1. Calculated for years 2008-2012, the most recent year for which DCF economic data are available. 2. The same clustering approach adopted for the ROI or RoFTA was adopted.
Technical/inactivity indicators	**UTR** Fleet segment utilisation ratio Average Days at Sea / Maximum Days at Sea	JRC	1. Calculated using latest uploaded data for years 2008-2012. 2. Preliminary indicator values for 2013 were provided wherever possible. 3. Member States (MS) had provided either maximum observed days at sea (DAS) for each fleet segment or maximum theoretical DAS. 4. Due to several inconsistencies in the data provided by some MS for maximum theoretical DAS, the EWG decided to use the value of 220 maximum theoretical days at sea per fleet segment for all MS.
	Inactive vessels per length category	JRC	1. Number and proportion of inactive vessels, in number, GT and kW provided based on MS fleet register data for years 2008-2012. 2. Preliminary numbers of inactive vessels for 2013 were provided wherever possible.
Data source: 2014 DCF data call (MARE/A3/AC(2014); last data upload 19/09/2014			

The data used to compile the various indicators were collected under the Data Collection Framework (DCF), cf. Council Regulation (European Commission (EC) No 199/2008 of 25th February 2008). Technical and economic balance indicators were calculated using data

submitted under the 2014 DCF call for economic data on the EU fishing fleet issued by DG MARE on 4 February 2014 (MARE/A3/AC(2014)). The two biological indicators (SHI and SAR indicator) were calculated based on DCF data[4] submitted under the same data call. Additional information needed to calculate the biological indictors ($F_{current}$, F_{MSY} etc.) was obtained from other sources (see sections 2.4.1.1 and 2.4.2.1 for details on calculation).

The 2014 fleet economic data call requested transversal and economic data covering years 2008 to 2014. Capacity data (GT, kW, no. of vessels) was requested up to and including 2014, while employment and economic parameters were requested up to and including 2012. Most effort and all landings data were requested up to and including 2013, as well as, income from landings (non-mandatory) to allow for economic performance projections to be estimated at fleet segment and national level for 2013[5]. In terms of the completeness of the Member States data submissions, most countries submitted the majority of the parameters requested under the call. In many cases missing data relates to fleet segments with low vessel numbers. As 'maximum days at sea by fleet segment' is not a DCF parameter, it is requested and submitted through the data call on a voluntary basis.

In terms of data quality, inevitably some 'abnormal' or unexpected estimates for various indicators were detected by JRC or the experts, and in many cases were rectified by the Member States. However, some quality issues remained outstanding. Greece provided data but only for 2012, and with substantial amounts of missing data, in particular on effort and landings. Croatia submitted DCF data for the first time, providing economic data for the years 2011 and 2012. Submission from Cyprus, France and Spain continue to be incomplete and some data quality issues remain for several other Member States, such as Bulgaria and Malta.

EWG 14-12 used the dataset available for the meeting but, due to the limited time available, did not assess the quality or the reliability of the biological data made available. For the economic and technical variables (except for the maximum DAS voluntary delivered by MS), the quality and reliability of data was already checked during the AER EWG (EWG 14-04 / 14-05). However, no comments from the AER EWG on the quality of the data were made available to experts during EWGs 14-12 / 14-21.

2.3 Fleet Segment Coverage of Indicators

Some of the indicators could not be calculated for all fleet segments due to lack of data or, in the case of economic and technical indicators, due to clustering segments together, which is done in order to protect commercial confidentiality.
Fleet segments necessarily include only vessels which have been active, since it is their activity that allocates them to a fleet segment. Inactive vessels are counted and categorised at national and where applicable regional level,[6] according to the length of the vessel.
The tables below show, for each MS, the number of fleet segments, the number of vessel length categories (of which there are six[7]) that have inactive vessels, the total number of segments when clustering is done and the number of fleet segments for which each indicator is calculated.

[4] DCF value and weight of landings in the case of SHI, and landings weight in the case of the SAR indicator.
[5] Non-mandatory 2013 data requested under the DCF data call is flagged as preliminary in the AER.
[6] Appendix III of Commission Decision 2010/93/EU specifies the data collection requirements for fleet segmentation by region.
[7] VL 00-10m; VL 10-12m; VL 12-18m; VL 18-24m; VL 24-40m; VL 40-XXm.

Table 2.2 – Total number of fleet segments, number of inactive vessel length-groups and number of fleet segments after clustering included in MS summary indicator tables and the number of fleet segments covered by each indicator, for the years 2008-2013.

ND = No data or insufficient data available for the calculation of the indicator in question

NA = Not applicable

Total number of active fleet segments

	2008	2009	2010	2011	2012	2013
BEL	9	10	10	10	10	11
BGR	13	14	14	15	19	22
CYP	4	7	6	6	6	7
DEU	24	23	23	23	21	21
DNK	17	17	16	15	19	ND
ESP	59	63	62	74	80	84
EST	8	7	9	9	9	8
FIN	6	6	6	6	6	5
FRA	107	105	103	102	100	ND
GBR	47	48	51	50	47	46
GRC	ND	ND	ND	ND	11	ND
HRV	NA	NA	NA	33	31	34
IRL	40	37	33	37	36	32
ITA	23	24	22	23	25	22
LTU	8	8	8	8	8	8
LVA	4	4	4	4	4	4
MLT	21	24	22	24	23	23
NLD	10	10	10	10	10	10
POL	12	16	16	16	17	17
PRT	56	55	54	48	48	46
ROU	5	7	5	6	7	6
SVN	5	5	5	5	5	4
SWE	35	27	28	28	27	25
Total	**513**	**517**	**507**	**552**	**569**	**435**

Total number of Inactive length-groups

2008	2009	2010	2011	2012	2013
2	3	3	2	2	2
1	1	1	1	1	4
5	5	4	4	5	5
6	6	6	5	6	6
6	6	5	6	5	ND
6	6	6	6	6	6
3	3	3	3	3	2
4	5	4	3	3	3
ND	ND	ND	ND	ND	ND
6	6	6	6	6	6
ND	ND	ND	ND	ND	ND
NA	NA	NA	5	5	5
5	5	5	5	5	5
5	5	6	5	6	5
5	5	6	6	6	5
ND	ND	ND	3	1	1
5	5	6	6	5	5
6	6	6	6	6	6
5	5	5	5	4	4
6	6	6	6	6	6
4	5	5	4	2	2
4	4	4	4	4	4
6	5	5	5	5	5
90	**92**	**92**	**96**	**92**	**87**

Number of active fleet segments after clustering

	2008	2009	2010	2011	2012	2013
BEL	7	7	7	7	7	7
BGR	9	10	10	10	14	3
CYP	4	6	6	6	6	7
DEU	14	14	14	14	14	14
DNK	17	17	16	15	19	ND
ESP	46	52	51	55	57	77
EST	5	5	6	6	6	5
FIN	6	6	6	6	6	5
FRA	107	95	86	82	74	ND
GBR	26	26	26	26	26	26
GRC	ND	ND	ND	ND	11	ND
HRV	NA	NA	NA	24	23	22
IRL	26	24	22	23	23	21
ITA	23	24	22	23	25	22
LTU	5	5	5	5	5	5
LVA	4	4	4	4	4	4
MLT	21	24	22	24	23	23
NLD	10	10	10	10	10	10
POL	9	10	11	10	8	9
PRT	41	42	44	43	44	44
ROU	3	4	2	3	4	3
SVN	5	5	5	5	5	4
SWE	7	7	7	7	7	7
Total	**395**	**397**	**382**	**408**	**421**	**318**

RoFTA

	2008	2009	2010	2011	2012
BEL	3	7	7	6	7
BGR	2	3	3	2	3
CYP	4	4	4	4	4
DEU	13	13	13	13	13
DNK	17	17	16	15	19
ESP	ND	ND	ND	49	44
EST	4	4	4	4	4
FIN	6	6	6	6	5
FRA	ND	ND	54	52	45
GBR	26	26	26	26	26
GRC	ND	ND	ND	ND	ND
HRV	NA	NA	NA	17	16
IRL	13	9	10	12	9
ITA	22	23	22	23	24
LTU	5	5	5	5	5
LVA	ND	4	4	4	4
MLT	16	17	18	16	16
NLD	9	9	10	9	10
POL	7	8	9	8	6
PRT	39	41	41	43	44
ROU	3	4	2	3	4
SVN	5	5	5	5	4
SWE	7	7	7	7	7
Total	**201**	**212**	**266**	**329**	**319**

RoI

	2008	2009	2010	2011	2012
BEL	0	0	0	0	0
BGR	0	0	0	0	0
CYP	0	0	0	0	0
DEU	0	0	0	0	0
DNK	14	17	16	15	19
ESP	ND	ND	ND	4	5
EST	4	4	4	4	4
FIN	0	0	0	0	0
FRA	ND	ND	0	0	0
GBR	26	26	26	26	26
GRC	ND	ND	ND	ND	ND
HRV	NA	NA	NA	2	2
IRL	0	0	0	0	0
ITA	0	0	0	0	0
LTU	0	0	0	0	0
LVA	ND	0	0	0	0
MLT	0	9	12	4	11
NLD	9	8	10	8	10
POL	0	0	0	0	0
PRT	0	0	0	0	0
ROU	3	4	2	3	4
SVN	0	0	0	0	0
SWE	0	0	0	0	0
Total	**56**	**68**	**70**	**66**	**81**

Net profit margin

	2008	2009	2010	2011	2012
BEL	3	7	7	6	7
BGR	2	3	3	2	3
CYP	4	4	4	4	4
DEU	13	13	13	13	13
DNK	17	17	16	15	19
ESP	ND	ND	ND	49	44
EST	4	4	4	4	4
FIN	6	6	6	6	5
FRA	ND	ND	54	52	45
GBR	26	26	26	26	26
GRC	ND	ND	ND	ND	ND
HRV	NA	NA	NA	NA	16
IRL	13	9	10	12	9
ITA	22	23	22	23	24
LTU	5	5	5	5	5
LVA	ND	4	4	4	4
MLT	16	17	18	16	16
NLD	9	9	10	9	10
POL	7	8	9	8	6
PRT	39	41	41	43	44
ROU	3	4	2	3	4
SVN	5	5	5	5	4
SWE	7	7	7	7	7
Total	**201**	**212**	**266**	**312**	**319**

CR/BER

	2008	2009	2010	2011	2012
BEL	6	7	7	7	7
BGR	2	3	3	2	4
CYP	4	4	4	4	4
DEU	13	13	13	13	13
DNK	17	17	16	15	19
ESP	43	48	37	49	44
EST	4	4	4	4	4
FIN	6	6	6	6	5
FRA	48	31	55	52	45
GBR	26	26	26	26	26
GRC	ND	ND	ND	ND	ND
HRV	NA	NA	NA	17	16
IRL	13	10	10	12	10
ITA	22	23	22	23	24
LTU	5	5	5	5	5
LVA	ND	4	4	4	4
MLT	16	17	18	16	16
NLD	9	9	10	9	10
POL	7	8	9	8	6
PRT	40	41	44	43	44
ROU	3	4	2	3	4
SVN	5	5	5	5	4
SWE	7	7	7	7	7
Total	**296**	**292**	**307**	**330**	**321**

UTR

	2008	2009	2010	2011	2012	2013
BEL	7	7	7	7	7	9
BGR	6	6	6	7	14	7
CYP		6	6	4		12
DEU	13	13	13	13	13	20
DNK	17	17	16	15	19	ND
ESP	ND	ND	ND	ND	57	97
EST	2	2	2	2	2	7
FIN	6	6	6	6	6	8
FRA	ND	ND	66	64	65	ND
GBR	26	26	26	26	26	32
GRC	ND	ND	ND	ND	ND	ND
HRV	NA	NA	NA	24	23	27
IRL	18	14	14	15	16	26
ITA	23	24	21	22	24	27
LTU	5	5	5	5	5	10
LVA	4	4	4	4	4	5
MLT	19	22	20	19	21	28
NLD	10	10	10	10	10	16
POL	9	10	11	10	8	13
PRT	41	41	44	43	44	50
ROU	3	4	2	3	4	5
SVN	5	5	5	5	5	8
SWE	7	7	7	7	7	10
Total	**221**	**229**	**291**	**311**	**380**	**417**

The tables below show, for each MS, the number of active and inactive vessels, the number of vessels and proportion of vessels to MS fleet for which corresponding landings data were available.

Table 2.3. shows that landings in value was available for most MS fleet segments, with over 90% of the vessels covered in most MS. Exceptions include Cyprus (for the years 2009 to 2012), France and Ireland. In the case of the Irish fleet, the low proportion of vessels covered by landings is mainly due to missing landings data for a significant part of the small scale fleet (under 10 m) due to a data collection issue.

Table 2.3 – Total number of active and inactive vessels in each MS fleet and the number of vessels for which landings data was available and included in MS summary indicator tables for the years, 2008-2012/13.

ND = No data or insufficient data available for the calculation of the indicator in question
NA = Not applicable

Number of active vessels

	2008	2009	2010	2011	2012	2013
BEL	98	92	84	83	82	80
BGR	854	1118	1383	1010	1192	1204
CYP	530	901	907	964	858	927
DEU	1348	1311	1260	1227	1153	1142
DNK	1810	1769	1639	1603	1537	ND
ESP	9803	9683	10355	9885	8938	8795
EST	950	941	934	923	913	1342
FIN	1553	1531	1619	1649	1952	1895
FRA	6605	6475	6100	6003	5830	ND
GBR	4704	4656	4585	4651	4586	4453
GRC	ND	ND	ND	ND	16063	ND
HRV	NA	NA	NA	2843	2815	2739
IRL	1788	1859	1924	1968	2024	2068
ITA	13470	13374	13284	13319	12951	12603
LTU	125	124	104	103	104	94
LVA	858	814	771	319	279	273
MLT	703	779	848	634	784	774
NLD	599	569	580	570	558	544
POL	841	768	724	721	768	793
PRT	5276	5150	5022	4882	4323	4051
ROU	405	160	206	200	183	112
SVN	88	87	91	84	89	83
SWE	1148	1132	1064	1031	1019	982
Total	53556	53293	53484	54672	69001	44954

Number of inactive vessels

	2008	2009	2010	2011	2012	2013
BEL	4	8	5	6	4	3
BGR	1826	1303	1309	1335	1195	862
CYP	832	866	408	419	524	537
DEU	513	506	499	437	411	400
DNK	1003	1017	1043	1060	515	ND
ESP	3312	1818	854	1007	1606	1372
EST	14	22	13	11	10	7
FIN	1687	1709	1662	1716	1407	1344
FRA	ND	ND	ND	ND	ND	ND
GBR	2089	1963	1958	1818	1830	1954
GRC	ND	ND	ND	ND	ND	ND
HRV	NA	NA	NA	1069	1421	1629
IRL	184	185	195	194	179	179
ITA	1568	1603	1685	1396	1545	1536
LTU	125	95	89	68	47	54
LVA	ND	ND	ND	88	77	81
MLT	613	332	264	453	276	266
NLD	127	143	145	168	182	197
POL	41	109	99	84	38	43
PRT	3431	3514	3584	3675	4075	4274
ROU	36	280	223	288	78	84
SVN	93	98	94	102	92	88
SWE	359	339	351	328	303	317
Total	17857	15910	14480	15722	15815	15227

Number of vessels with landings data

MS	2008	2009	2010	2011	2012
BEL	98	92	84	83	82
BGR	834	1,118	1,383	1,010	1,192
CYP	498	484	487	492	467
DEU	1,336	1,304	1,251	1,217	1,145
DNK	1,810	1,769	1,639	1,603	1,537
ESP	ND	ND	ND	ND	8,938
EST	944	937	929	918	908
FIN	1,553	1,531	1,619	1,649	1,952
FRA	3,280	5,706	6,072	4,079	5,203
GBR	4,704	4,656	4,585	4,651	4,586
GRC	ND	ND	ND	ND	ND
HRV	NA	NA	NA	2,843	2,815
IRL	583	740	753	766	789
ITA	13,470	13,374	13,284	13,319	12,951
LTU	125	124	104	103	104
LVA	858	814	771	319	279
MLT	693	772	831	626	776
NLD	599	569	580	570	558
POL	836	763	720	717	765
PRT	5,276	5,148	5,022	4,882	4,323
ROU	405	160	206	200	183
SVN	88	87	91	84	88
SWE	1,148	1,132	1,064	1,031	1,019
Total	**39,138**	**41,280**	**41,475**	**41,162**	**50,660**

Proportion of vessels with landings data

MS	2008	2009	2010	2011	2012
BEL	100%	100%	100%	100%	100%
BGR	98%	100%	100%	100%	100%
CYP	94%	54%	54%	51%	54%
DEU	99%	99%	99%	99%	99%
DNK	100%	100%	100%	100%	100%
ESP	ND	ND	ND	ND	100%
EST	99%	100%	99%	99%	99%
FIN	100%	100%	100%	100%	100%
FRA	50%	88%	100%	68%	89%
GBR	100%	100%	100%	100%	100%
GRC	ND	ND	ND	ND	0%
HRV	NA	NA	NA	100%	100%
IRL	33%	40%	39%	39%	39%
ITA	100%	100%	100%	100%	100%
LTU	100%	100%	100%	100%	100%
LVA	100%	100%	100%	100%	100%
MLT	99%	99%	98%	99%	99%
NLD	100%	100%	100%	100%	100%
POL	99%	99%	99%	99%	100%
PRT	100%	100%	100%	100%	100%
ROU	100%	100%	100%	100%	100%
SVN	100%	100%	100%	100%	99%
SWE	100%	100%	100%	100%	100%
Total	**73%**	**77%**	**78%**	**75%**	**73%**

Table 2.4 shows indicator coverage per MS in terms of the proportion of MS landed value that is made by fleet segments which have an indicator value, i.e. for which there is indicator coverage. It is important to note that full coverage does not necessarily cover all MS fleet segments/vessels since the sum of landed values for individual fleet segments provided by MS may not necessarily correspond to the total landed value of a MS fleet.

For confidentiality reasons, some MS may not provide landings data for specific fleet segments in cases where the data is considered sensitive and clustering of fleet segments may be insufficient to overcome breaching confidentiality rules. For example, landings for the German pelagic fleet are not provided but the SHI indicator appears to have full coverage. This is because the coverage of the indicator is only relative to the data provided and should therefore be considered together with the number of fleet segments and/or vessels.

Table 2.4 Coverage of each balance indicator in terms of landed value submitted by MS and year.

ND = No data or insufficient data available for the calculation of the indicator in question (including lack of stock parameters in AREA37 affecting the calculation of the SHI for the years 2008-2011 and 2013)
NA = Not applicable

		SHI					
	MS	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
AREA27	BEL	100%	100%	100%	100%	100%	100%
	DEU	100%	100%	100%	100%	100%	100%
	DNK	100%	99%	100%	100%	100%	ND
	ESP	ND	ND	ND	ND	99%	ND
	EST	100%	100%	100%	100%	100%	100%
	FIN	100%	100%	100%	100%	100%	100%
	FRA	ND	99%	99%	100%	99%	ND
	GBR	99%	99%	99%	100%	99%	98%
	IRL	96%	92%	91%	87%	99%	96%
	LTU	100%	100%	100%	100%	100%	100%
	LVA	100%	100%	100%	100%	100%	100%
	NLD	98%	100%	99%	100%	98%	99%
	POL	ND	ND	ND	99%	100%	100%
	PRT	99%	99%	100%	99%	99%	99%
	SWE	100%	100%	100%	100%	100%	100%
AREA37	BGR	ND	ND	ND	ND	77%	ND
	CYP	ND	ND	ND	ND	100%	ND
	ESP	ND	ND	ND	ND	99%	ND
	FRA	ND	ND	ND	ND	95%	ND
	HRV	NA	NA	NA	NA	100%	ND
	ITA	ND	ND	ND	ND	94%	ND
	MLT	ND	ND	ND	ND	91%	ND
	MLT	ND	ND	ND	ND	0%	ND
	ROU	ND	ND	ND	ND	98%	ND
	SVN	ND	ND	ND	ND	100%	ND

	RoFTA				
MS	2008	2009	2010	2011	2012
BEL	93%	100%	100%	99%	100%
BGR	11%	70%	62%	13%	32%
CYP	100%	100%	100%	100%	100%
DEU	100%	100%	100%	100%	100%
DNK	100%	100%	99%	99%	100%
ESP	ND	ND	ND	ND	96%
EST	100%	100%	100%	100%	100%
FIN	100%	100%	100%	100%	100%
FRA	ND	ND	76%	79%	75%
GBR	100%	100%	100%	100%	100%
GRC	ND	ND	ND	ND	ND
HRV	NA	NA	NA	98%	98%
IRL	98%	92%	95%	93%	94%
ITA	99%	100%	100%	100%	100%
LTU	100%	100%	100%	100%	100%
LVA	ND	100%	100%	100%	100%
MLT	85%	89%	93%	78%	100%
NLD	100%	100%	100%	100%	100%
POL	100%	100%	100%	100%	100%
PRT	99%	100%	96%	100%	100%
ROU	100%	100%	100%	100%	100%
SVN	100%	100%	100%	100%	100%
SWE	100%	100%	100%	100%	100%

	ROI				
MS	2008	2009	2010	2011	2012
BEL	0%	0%	0%	0%	0%
BGR	0%	0%	0%	0%	0%
CYP	0%	0%	0%	0%	0%
DEU	0%	0%	0%	0%	0%
DNK	99%	100%	99%	99%	100%
ESP	ND	ND	ND	ND	20%
EST	100%	100%	100%	100%	100%
FIN	0%	0%	0%	0%	0%
FRA	ND	ND	0%	0%	0%
GBR	100%	100%	100%	100%	100%
GRC	ND	ND	ND	ND	ND
HRV	NA	NA	NA	57%	53%
IRL	0%	0%	0%	0%	0%
ITA	0%	0%	0%	0%	0%
LTU	0%	0%	0%	0%	0%
LVA	ND	0%	0%	0%	0%
MLT	0%	73%	91%	41%	90%
NLD	100%	97%	100%	97%	100%
POL	0%	0%	0%	0%	0%
PRT	0%	0%	0%	0%	0%
ROU	100%	100%	100%	100%	100%
SVN	0%	0%	0%	0%	0%
SWE	0%	0%	0%	0%	0%

	CR/BER				
MS	2008	2009	2010	2011	2012
BEL	93%	100%	100%	99%	100%
BGR	11%	70%	62%	13%	32%
CYP	100%	100%	100%	100%	100%
DEU	100%	100%	100%	100%	100%
DNK	100%	100%	99%	99%	100%
ESP	ND	ND	ND	ND	96%
EST	100%	100%	100%	100%	100%
FIN	100%	100%	100%	100%	100%
FRA	ND	ND	76%	79%	75%
GBR	100%	100%	100%	100%	100%
GRC	ND	ND	ND	ND	ND
HRV	NA	NA	NA	98%	98%
IRL	98%	92%	95%	93%	94%
ITA	99%	100%	100%	100%	100%
LTU	100%	100%	100%	100%	100%
LVA	ND	100%	100%	100%	100%
MLT	85%	89%	93%	78%	100%
NLD	100%	100%	100%	100%	100%
POL	100%	100%	100%	100%	100%
PRT	99%	100%	96%	100%	100%
ROU	100%	100%	100%	100%	100%
SVN	100%	100%	100%	100%	100%
SWE	100%	100%	100%	100%	100%

	UTR-220					
MS	2008	2009	2010	2011	2012	2013
BEL	100%	100%	100%	100%	100%	99%
BGR	92%	95%	84%	86%	97%	100%
CYP	100%	100%	100%	100%	100%	100%
DEU	100%	100%	100%	100%	100%	100%
DNK	100%	100%	99%	99%	100%	ND
ESP	ND	ND	ND	ND	100%	ND
EST	100%	100%	100%	100%	100%	100%
FIN	100%	100%	100%	100%	100%	100%
FRA	ND	89%	87%	88%	84%	ND
GBR	100%	100%	100%	100%	100%	100%
GRC	ND	ND	ND	ND	ND	ND
HRV	NA	NA	NA	100%	100%	100%
IRL	98%	98%	100%	100%	100%	100%
ITA	100%	100%	99%	99%	98%	ND
LTU	100%	100%	100%	100%	100%	100%
LVA	100%	100%	100%	100%	100%	100%
MLT	100%	100%	100%	100%	100%	100%
NLD	100%	100%	100%	100%	100%	100%
POL	100%	100%	100%	100%	100%	100%
PRT	100%	100%	100%	100%	100%	100%
ROU	100%	100%	100%	100%	100%	100%
SVN	100%	100%	100%	100%	100%	100%
SWE	100%	100%	100%	100%	100%	100%

SHI

Overall the SHI had a full or almost complete coverage of the landings data provided for all MS fleets in Area 27. In Area 37 (Mediterranean and Black Sea fishing regions), for which data was only readily available for 2012, most MS had high coverage with the exception of Bulgaria (77%) and, to a lesser extent, France (95%). However, this coverage includes SHI values that were calculated for all stocks with assessment data, even if the proportion of landings value of the assessed stocks made up less than 40% of the total landings value of the fleet segment, i.e. in such cases, the indicator is considered as unrepresentative/unreliable. The coverage of this indicator when only taking into account fleet segments for which the proportion of landings value of the assessed stocks made up more than 40% of the total landings value of the fleet segment is presented in Table 2.6 below. No data was available for Greece. Data was only available in 2012 for Spain.

A 100% coverage indicates that, when analysed by landed value, all MS fleet segments landed species for which at least one SHI could be calculated, i.e. species composition of landings for all MS fleet segments contained at least one assessed stock. Low coverage indicates that only a small portion of the landing composition of the MS fleet segments landed at least one stock with available biological parameters for the calculation of SHI. A 0% coverage indicates that there were no stocks with available biological parameters for the calculation of SHI in the landings composition of all MS fleet segments. Overall, coverage for SHI has remained quite stable across MS and years analysed.

SAR

For the SAR indicator, all fleet segments with corresponding landings data were screened for stocks falling under the definition of stocks at risk; all of the landings data provided by MS were thus considered in the SAR analysis. However due to the manner in which the SAR indicator was calculated it is not always possible to distinguish between (i) fleet segments which did not fish any stocks at risk, and (ii) fleet segments which could not be included in the analysis due lacking or problematic landings data (see section 2.4.2.1 below). For this reason SAR coverage in terms of landed value submitted by MS has not been included in Table 2.4, and cannot be discussed further here.

ROI or RoFTA

For RoFTA, most MS presented full or almost complete coverage of fleet segments (100%), exceptions being Bulgaria, France and Malta. RoFTA coverage is consistent within the years for MS, except Bulgaria and Malta, for which coverage fluctuates substantially.

For the ROI indicator, coverage is low as the DCF data on fishing rights (income from rights, associated fishing rights costs and estimated value of fishing rights) required to estimate the indicator is either not applicable (no rights based fisheries exist in some MS) or not available for several MS. Denmark, Estonia, the UK, The Netherlands and Romania are exceptions and have good coverage because these MS have rights-based fisheries and were able to provide the necessary data on fishing rights. For Malta coverage for ROI is only available since 2009, and coverage fluctuates.

No data was available for Greece. Data was only available in 2012 for Spain.

UTR

Most MS have full coverage (100%) for all years assessed, i.e. the indicator was calculated for fleet segments that represent all or almost all the landings in value[8] by the MS fleet.
Exceptions include Bulgaria and France, where coverage is less than 90% in some or all years, i.e. indicator values are available for fleet segments representing less than 90% of the landed value. These MS also reveal some inconsistency in coverage over the period 2008-2012.

No data was available for Greece. Data was only available in 2012 for Spain.

CR/BER

For the majority of the MS, full coverage of the CR/BER indicator was possible. Again, exceptions include Bulgaria and France as well as, to a lesser extent, Ireland and Malta. CR/BER coverage is consistent within the years, except for BRG, which presented variations.

No data was available for Greece. Data was only available in 2012 for Spain.

2.4 Consideration of Indicators

EWG 14-12 followed the 2014 Balance Indicator Guidelines for MS but also tried to be consistent with the recommendations of EWG 13-28 when considering biological / economic / technical indicators, and making interpretative comments. On this basis, the group agreed on the following assessment method for each indicator:

1. For fleet segments for which indicator values could be calculated, EWG 14-12 assessed the availability of a suitable time-series of indicator values.

2. Where suitable time series were available a comment is made indicating if the values show an increasing, decreasing or no significant trend. Experts also provided additional comments for each fleet segment and indicator where relevant.

The group could not assess in any detail the reliability of the data and indicator values which were made available in the limited time available. For biological indicators it was not possible to assess the reliability of the data that were used to calculate indicator values. Instead, additional information on, for instance, the coverage of the indicator was provided. A number of MS however identified inconsistencies between the indicators provided to them and when recalculated by the MS, which suggest that there may be errors present in the biological indicators (see section 2.6); further checking and/or peer review would thus have been appropriate prior to using the indicator values for the purpose of the EWG. For the technical and economic indicators, it was assumed that AER EWG 14-04 / 14-05 had already quality checked the data. In some cases, the assessment of the economic indicators was made difficult because of the use of inconsistent clustering of fleet segments over time by some MS. This problem has already been highlighted in the EWG 13-28 report.

[8] Landings value provided by MS under the DCF and considered in this assessment may not necessarily cover all landings by the MS fleet. In some cases, MS do not submit data on landings for specific fleet segments where there may be confidentially issues, for example, the German pelagic trawlers.

Experts did not comment on whether specific fleet segments are in or out of balance with their fishing opportunities since this is a judgement which must include consideration of political aims and preferences and also depends on the individual characteristics of fleet segments, communities and fisheries. This judgement call should ultimately be made by fisheries management decision makers with relevant regional expertise.

2.4.1 Sustainable Harvest Indicator (SHI)

The sustainable harvest indicator is designed to reflect the extent to which a fleet segment is dependent on stocks that are overharvested. Here, 'overharvested' is assessed with reference to F_{MSY} values over time, and dependency is based on fleet segment revenues. Where F_{MSY} is defined as a range, exceeding the upper end of the range is interpreted as 'overharvesting'. Values of the indicator above 1 indicate that a fleet segment was (during the reference years), on average, relying for its income on fishing opportunities which were set above levels corresponding to MSY. It is implied that an indicator value over 1 could be an indication of imbalance if it has occurred for three consecutive years. Shorter time periods should be considered in the case of small pelagic species**.**

2.4.1.1 Method of Calculating, Presenting and Assessing the SHI

As a first step, DCF landings data provided by MS are attributed to the relevant stocks. The stock reference list used in the calculation of the SHI is provided in Annex I.

The following formula is then used to calculate the SHI:

$$\frac{\sum_{i=1}^{i=n} V_i \frac{F_i}{Fmsy_i}}{\sum_{i=1}^{i=n} \sum V_i}$$

F is the most recent value of fishing mortality available for the from scientific assessments.
Vi is the landing values (or volume), for the concerned fleet, of the stock i.

For each fleet (whenever information on at least one stock is available) the parameters illustrated in Table 2.5 were compiled by the *ad hoc* contractor who calculated the SHI.

Data on $F_{current}$ (mean F) and F_{MSY} for fish stocks found in Area 27 were obtained from the ICES online database. Such a database is not provided by GFCM, so for Area 37 the most recent estimate of $F_{current}$ and F_{MSY} (or its proxy $F_{0.1}$) were extracted from the STECF report on Review of Scientific Advice - Consolidated Advice on Fish Stocks of Interest to the European Union for 2014[9]. This document provides a synthesis of stock assessment results coming from both STECF and GFCM stock assessment working groups evaluating Mediterranean and Black Sea fish stocks. This report however only contains the most recent estimates of $F_{current}$ and F_{MSY} (or the FM_{SY} proxy $F_{0.1}$); the 2008-2013 time series of F current for each year estimated by an analytical stock assessment as required for the calculation of the SHI indicator are thus not readily available for Area 37.

[9] Scientific, Technical and Economic Committee for Fisheries (STECF) – Review of scientific advice for 2014 – Consolidated Advice on Fish Stocks of Interest to the European Union (STECF-13-27). 2013. Publications Office of the European Union, Luxembourg, EUR 26328 EN, JRC 86158, 575 pp.

Table 2.5. Parameters estimated as part of the SHI calculation.

Parameter	Parameter Description	Example
FLEET_SEGMENT	Name of the fleet SEGMENT (MS + Gear + Length Class)	SWE TM VL40XX
capt_assessed_F_2	Landings values (or weight) for the fleet of the stocks for which we have an Fc/Fmsy available.	15307723
Fishstock_F2	List of the stocks that are included in the indicator	her-30 her-3a22 her-47d3 her-riga hom-west mac-nea spr-2232
nb_stock_assessed	Number of stocks included in the indicator	7
stock_over_exploited	Number of stocks over fished in the indicator F2*>1	5
F_etoile2	The 'Sustainable Harvest Indicator'	1.05080037
ratio_F2	Part of the landing values (or weight) of the fleet that are included in the indicator (capt_assessed_F_2 / capt_totale)	78.3796104
capt_totale	Total landing values (or weight) of this fleet in this area (27 or 37)	19530236.8
rate_in_EC	Proportion of the landings values (or weights) of this fleet compared to the total landings values (or weights) of the area.	0.60947593

With regards to highly migratory fish stocks, the same STECF report on Review of Scientific Advice - Consolidated Advice on Fish Stocks of Interest to the European Union for 2014 was used as a source of stock assessment advice information for the following stocks: (i) Eastern Atlantic and Mediterranean Sea bluefin tuna, (ii) North Atlantic Ocean albacore tuna, (iii) Atlantic Ocean yellowfin tuna, (iv) Atlantic Ocean blue and while marlin. As was the case for Area 37, only the most recent estimates of $F_{current}$ and F_{MSY} could be extracted from this report.

In line with the 2014 Guidelines for the analysis of balance between fishing capacity and fishing opportunities (COM (2014) 545 final), the SHI was also calculated based on landings volumes for consideration by EWG 14-12. This calculation was done for the years 2008-2012 and 2013 where possible, but only results for 2012 based on the most recent fishing mortality rate estimated for each stock are presented. This is because EWG 14-12 identified an error in the calculation whereby the most recent estimate of F was used in the SHI calculation of the entire time series, instead of the true time series of F as calculated by the relevant analytical stock assessments.

EWG 14-12 commented on SHI indicator values as follows to identify fleet segments where there is/are:

- *Insufficient recent data*: Data unavailable for one of more of the last 3 consecutive years in relation to the reference year 2012
- *Lack of data*: Data unavailable for the entire time series 2008-2012

Insufficient recent data and lack of data may refer to either unavailable landings value data or stock assessment parameters. To help distinguish between the two, coverage of landing value data by fleet segment and year is provided. Furthermore, missing data may be due to the clustering of fleet segments. However, as the DCF transversal variables are requested by fleet

segment, whether data was unavailable due to clustering (or inconsistent clustering) was not considered and flagged as either insufficient recent data or lack of data.

Fleet segments with *Low Coverage (LC),* i.e. when the SHI is unreliable because those stocks for which the F/Fmsy can be calculated make up <40% of the total landings value of the fleet segment, were also highlighted.

SHI trends were not calculated due to the large number of issues and problems identified with the SHI (see sections 2.4.1.4 and 2.4.1.5).

2.4.1.2 SHI Data Availability and Reliability

Data quality was a major concern when calculating and attempting to interpret the SHI:

- No data on landings by species were available for Greece;
- Spanish data were available only for 2012;
- Information on fishing sub-regions were not always available for France for a part of the landings (an average of 27% from 2008-2012). These landings were taken into account for the total landings for the biological indicators calculation, but it was not possible to allocate them to a specific stock due to the lack of information on regions where catches were made.
- EWG 14-12 decided not to use 2013 SHI values since: (i) 2013 data were not available for all MS and (ii) previous experience has shown that landings data submitted by MS is in many cases incomplete and preliminary, and likely to be changed in subsequent data uploads. Data from France and Denmark for instance were not available for 2013.

Additional information was provided by the *ad hoc* contractor on the % of landings (in value and weight) covered by stocks for which values of F and F_{MSY} are available (see Annex III). This information was used to assess the coverage of the data and the reliability of the SHI for the fleet segments under consideration.

2.4.1.3 Findings for the SHI

Due to the large number of issues and problems identified with the SHI (see sections 2.4.1.4 and 2.4.1.5 below), the Expert Group considered that it would be inappropriate to draw any conclusions on the SHI indicator, or to assess SHI indicator trends.

Table 2.6 presents the coverage for the SHI indicator. As the SHI is based on those stocks for which the F/Fmsy can be calculated make up >40% of the total landings value of the fleet segment, the overall indicator coverage is much lower than the values presented in Table 2.4 above.

Table 2.6 Coverage of representative SHI in terms of percentage landed value, landed weight, number of vessels, GT, and engine kW by MS and year. Representative means the indicator was calculated for stocks which make up >40% of the value of fleet segment landings.

	MS	Landed value					Landed weight					Number of vessels					Gross tonnage					Engine power (kW)				
		2008	2009	2010	2011	2012	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
AREA27	BEL	98.7%	98.5%	98.7%	97.5%	91.7%	98.9%	97.1%	100.0%	96.3%	90.2%	98.0%	97.8%	98.8%	91.6%	93.9%	99.1%	98.4%	98.6%	96.7%	91.4%	99.3%	98.4%	98.6%	96.1%	92.3%
	DEU	64.1%	67.7%	66.8%	38.8%	31.3%	82.9%	83.9%	77.9%	44.8%	45.0%	81.0%	81.5%	81.7%	80.9%	80.9%	53.1%	46.5%	47.4%	25.3%	16.4%	56.6%	54.8%	54.8%	40.7%	34.6%
	DNK	56.0%	77.3%	81.3%	80.9%	80.4%	67.3%	86.8%	88.3%	86.1%	84.3%	18.2%	21.7%	21.5%	21.2%	22.3%	59.8%	81.2%	80.5%	81.6%	82.8%	48.2%	63.4%	62.7%	63.3%	64.6%
	ESP	ND	ND	ND	ND	37.1%	ND	ND	ND	ND	32.4%	ND	ND	ND	ND	10.1%	ND	ND	ND	ND	41.6%	ND	ND	ND	ND	30.9%
	EST	84.5%	83.1%	81.6%	80.6%	76.7%	92.6%	92.0%	95.7%	95.1%	93.0%	16.1%	15.2%	14.8%	13.9%	13.4%	39.3%	45.1%	43.3%	40.3%	38.3%	45.6%	48.4%	47.2%	44.4%	43.5%
	FIN	68.2%	64.4%	65.6%	66.5%	67.6%	92.4%	91.9%	91.6%	91.5%	86.3%	4.3%	3.5%	3.2%	3.3%	4.6%	63.2%	63.7%	62.7%	67.8%	64.4%	27.4%	25.9%	24.7%	28.2%	27.8%
	FRA	ND	27.1%	27.6%	25.3%	25.6%	ND	21.0%	28.3%	23.5%	28.4%	ND	23.4%	11.9%	12.3%	12.2%	ND	36.7%	36.6%	35.6%	33.6%	ND	27.2%	22.4%	22.2%	21.3%
	GBR	41.5%	48.8%	45.6%	50.2%	47.9%	62.6%	63.7%	61.0%	62.7%	63.4%	3.9%	17.2%	3.8%	17.5%	3.4%	52.5%	53.8%	53.2%	54.4%	53.7%	31.9%	37.1%	32.8%	37.4%	33.0%
	IRL	36.7%	47.9%	36.4%	37.1%	46.1%	77.2%	80.9%	78.1%	69.5%	70.2%	2.3%	2.7%	2.1%	2.1%	2.0%	47.3%	53.9%	50.9%	46.7%	46.1%	28.1%	32.4%	30.0%	29.6%	30.5%
	LTU	96.0%	79.0%	99.8%	81.8%	69.3%	99.1%	68.6%	99.9%	66.7%	60.1%	33.6%	31.9%	100%	28.0%	34.0%	97.7%	83.4%	100%	82.6%	83.6%	86.6%	71.9%	100%	67.2%	70.6%
	LVA	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	NLD	74.4%	44.8%	43.3%	42.9%	69.8%	93.0%	12.7%	12.4%	12.7%	89.7%	27.7%	56.1%	19.1%	57.0%	18.5%	76.9%	32.7%	30.1%	32.0%	84.5%	74.2%	52.0%	45.5%	52.9%	72.7%
	POL	ND	ND	ND	83.4%	85.4%	ND	ND	ND	88.9%	89.2%	ND	ND	ND	30.6%	35.1%	ND	ND	ND	67.2%	68.4%	ND	ND	ND	60.3%	62.2%
	PRT	17.4%	19.3%	18.3%	20.0%	26.9%	9.1%	12.0%	11.1%	12.8%	12.2%	0.2%	0.3%	0.3%	0.3%	0.3%	32.1%	33.4%	35.2%	34.3%	35.1%	8.9%	9.6%	9.9%	9.7%	10.1%
	SWE	77.4%	63.9%	76.1%	76.9%	75.0%	94.0%	89.8%	95.3%	94.9%	93.7%	49.1%	45.6%	49.1%	46.8%	50.1%	82.8%	65.7%	83.9%	83.1%	83.0%	65.6%	54.6%	66.1%	63.5%	63.6%
AREA37	BGR	ND	ND	ND	ND	51.1%	ND	ND	ND	ND	46.3%	ND	ND	ND	ND	20.6%	ND	ND	ND	ND	60.3%	ND	ND	ND	ND	42.2%
	CYP	ND	ND	ND	ND	0.0%	ND	ND	ND	ND	0.0%	ND	ND	ND	ND	0.0%	ND	ND	ND	ND	0.0%	ND	ND	ND	ND	0.0%
	ESP	ND	ND	ND	ND	78.5%	ND	ND	ND	ND	84.9%	ND	ND	ND	ND	40.6%	ND	ND	ND	ND	83.9%	ND	ND	ND	ND	74.5%
	FRA	ND	ND	ND	ND	18.5%	ND	ND	ND	ND	6.2%	ND	ND	ND	ND	1.3%	ND	ND	ND	ND	22.7%	ND	ND	ND	ND	8.6%
	GRC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	HRV	NA	NA	NA	NA	75.4%	NA	NA	NA	NA	94.7%	NA	NA	NA	NA	43.3%	NA	NA	NA	NA	69.7%	NA	NA	NA	NA	61.7%
	ITA	ND	ND	ND	ND	60.3%	ND	ND	ND	ND	67.8%	ND	ND	ND	ND	22.4%	ND	ND	ND	ND	77.0%	ND	ND	ND	ND	58.4%
	MLT	ND	ND	ND	ND	0%	ND	ND	ND	ND	0%	ND	ND	ND	ND	0%	ND	ND	ND	ND	0%	ND	ND	ND	ND	0%
	PRT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0%	ND	ND	ND	ND	0%	ND	ND	ND	ND	0%
	ROU	ND	ND	ND	ND	38.1%	ND	ND	ND	ND	24.0%	ND	ND	ND	ND	68.3%	ND	ND	ND	ND	77.1%	ND	ND	ND	ND	71.0%
	SVN	ND	ND	ND	ND	20.6%	ND	ND	ND	ND	32.6%	ND	ND	ND	ND	4.5%	ND	ND	ND	ND	7.6%	ND	ND	ND	ND	7.5%

The coverage of representative SHI indicator values varies depending on whether it is calculated with regards to the landed value of catches, landed weight of catches, the number of fishing vessels, vessel GT, or vessel engine kW. Overall when calculated with regards to the number of vessels, representative coverage of SHI is low in the great majority of MS, whilst it is the highest when put in relation to landed catch weights.

There are considerable variations between MS. No data to calculate the SHI was available in 2008-2011 for Spain, in 2008 for France, in 2008-2012 for Greece, and 2008-2010 for Poland. SHI for Croatia was calculated for 2011 and 2012; Croatia joined the EU in 2013. Belgium, Latvia and Sweden have the highest representative coverage of SHI indicator values, whilst Malta, Cyprus and Portugal have very low coverage.

In Area 37 SHI estimates are only available for 2012, and coverage in the great majority of MS is very low.

Overall it is clear that coverage of representative values of the SHI is too variable, inconsistent and low in the great majority of MS to assess the extent to which each fleet relies (economically) on stocks that are fished above target rates.

2.4.1.4 General Biological Indicator Issues, Problems and Caveats

Paragraph 3 of the introduction to the current 2014 Balance Indicator Guidelines prepared by the Commission (COM(2014) 545 Final) asserts that for each fleet segment, the extent to which each fleet relies on stocks that are fished above the target rates, and an assessment of how many stocks that make up a significant part of their catches are at biological risk due to low abundance and are significantly affected by the fleet, will allow an assessment of the imbalance between each fleet segment and the stocks they rely on.

The indicators devised and prescribed in the 2014 Balance Indicator Guidelines to assess each of the above criteria are as follows:

a) Sustainable Harvest Indicator (SHI); used to indicate the extent to which each fleet relies on stocks that are fished above the target rates.

b) Stocks at Risk (SAR) indicator; used to assess how many stocks that make up a significant part of their catches are at biological risk due to low abundance and are significantly affected by the fleet.

EWGs 12-14 / 14-21 noted several general issues which affect the overall reliability of the biological indicators, most of which had already been highlighted at previous STECF EWG meetings (see section 2.4.1.5 below). These general issues are presented below together with some suggestions on appropriate measures to address the situation and to improve the accuracy of the biological indicator calculations.

Several changes to the current indicators are being proposed (see section 2.7 below). The considerations outlined below would however remain valid even if the proposed new indicators are adopted since data needs for the new indicators would be similar to those of the current biological indicators SHI and SAR.

The manner in which DCF landings data provided by MS are currently attributed to the relevant stocks (illustrated in Annex I) has to date not been peer reviewed or validated. The SHI and SAR indicators are calculated by *ad hoc* contracts, and provided to STECF EWGs

for interpretation. Due to the large number of fleet segments and indicators to consider and the limited amount of time available during Capacity EWGs, it has not been possible to review calculation methods. EWG 14-12 / 14-21 thus consider that the stock reference list (see Annex I) being used in the annual calculation of the SHI and SAR indicator (or the new proposed indicators) should be peer reviewed by a dedicated STECF EWG, or verified by the relevant bodies (ICES, GFCM) before further use as a standard in the annual balance indicator calculations.

In the Mediterranean the division of stocks according to Geographical Sub-Areas (GSAs) is currently used for stock assessment and management purposes. Landings information at species level is however currently not available to STECF EWGs at GSA level: the economic data call asks for data at the level of FAO Statistical Divisions (larger areas than GSA level), whilst the Mediterranean and Black Sea data call is restricted to only some of the species caught by the fleets. A similar issue applies to some ICES stocks which are identified for smaller areas than the FAO statistical level at which DCF data is currently being requested from MS (e.g.: scallop stocks in the English Channel). As a consequence there remains some concern that landings may have not been correctly allocated to the relevant stocks when calculating the biological balance indicators. EWG 14-12 thus considers that in future, DCF landings data should be requested at Level 4 of the geographic stratification by Regional Fisheries Management Organisations listed in Annex I of Commission Decision 93/2010 through the relevant JRC data calls.

Biological indicators could not be calculated for fleets operating in Other Fishing Regions (OFR), and for vessels operating exclusively outside Union waters. Whilst information on the most recent stock assessment results for stocks exploited by EU vessels operating in OFR as required for the calculation of the SHI (or the proposed NOS indictor, see section 2.7) is available in annual STECF review of advice reports (e.g. STECF 13-14), time series of fishing mortality estimates from analytical stock assessments are not readily available since there is no consolidated stock status database for stocks of interest to the EU in OFR. Moreover, landings data from the economic data call is aggregated for all OFRs (e.g. combining landings data from the Indian Ocean and the Southern Atlantic etc.). This data is thus not suitable to calculate biological indicators, for which landings data at stock level is required.

Landings weights / values are not always given at commercial species level, but several species may be clustered together into generic groupings such as ‘marine fish’, ‘rays’ or species complexes (e.g. landings of *Lophius bugegassa* and *Lophius piscatorius* tend to be reported in the generic category of ‘anglerfish’ or ‘monkfish’). For such species, total landings values were divided equally by the number of stocks, which is likely to result in an inaccurate estimation of landings by species. EWG 14-12 suggests that MS increase efforts to provide the landing values at the species level as is required under the DCF. Where species are difficult to distinguish at landing sites, the contributions of different species can still be estimated by taking samples and estimating contribution ratios of different species, as long as an adequate sampling strategy is in place.

Coastal fisheries of several MS target stocks which are assessed at national level, which at present are not included in the indicator calculations. Such national assessments should be included in order to improve the quality and coverage of biological indicator calculations. A necessary prerequisite would be the availability of landings values and weights at the same geographic stratification level as the stock distribution. The inclusion of such stock assessment data should be made after review by an appropriate scientific body.

As previously highlighted (see report of EWG 13-11) there is an urgent need to increase the knowledge on stock status by increasing the number of available stock assessments in order to improve the representativeness and utility of the biological indicators. EWG 14-12 compiled a list of priority stocks for which stock assessments should be carried out in order to increase the % of stocks for which values of F and F_{MSY} can be included in indicator calculations. The thirty most important stocks (based on catch values) targeted by fleet segments which together generated 80% of total landings values in FAO major fishing areas 27 (Northeast Atlantic) and 37 (Mediterranean and Black Sea) are presented in Annex II. Those stocks for which no stock assessments are available are also identified in Annex II. Annex II should be updated when landings data at a higher level of geographic resolution are available, i.e. at stock- rather than FAO statistical division- level landings data.

As in some cases economic indicators are calculated for clustered fleet segments, a direct comparison of biological and economic indicator values at fleet segment level is problematic. One way of addressing this issue is to also calculate biological indicator values for clustered fleet segments. However prior to doing this observed inconsistencies in the clustering of fleet segments when calculating economic indicators should be addressed. A sensitivity analysis should be carried out, calculating biological indicators for clustered and unclustered fleet segments, and assessing the impact clustering has on indicator values. If trends and overall conclusions for MS fleet segments based on biological indicators is similar with and without clustering, adopting the same clustering approach used for the calculation of economic indicators is suggested for the calculation of biological indicators.

2.4.1.5 SHI Issues, Problems and Caveats

In addition to the general issues which affect the overall reliability of the biological indicators, several problems specific to the nature of the SHI calculations were identified.

EWG 14-12 realised that for the Mediterranean and Black Sea the SHI was calculated using only one F/F_{MSY} estimate for the whole time series of landing values; only the most recent fishing mortality rate calculated for each stock as reported in the report of STECF EWG 13-14 was used in the calculation of the indicator. Since the time series of the SHI for the Mediterranean based on this input data is erroneous, only SHI values for 2012 are reported in the MS indicator table (see section 2.5 for link to table).

The SHI, used in isolation, merely provides the average ratio of F/F_{MSY} for those stocks caught by a specific fleet segment, weighted by the value of the landed catch from each of those stocks by that fleet segment. The resulting value simply indicates whether a particular fleet segment may be economically dependent on stocks that are estimated to be fished at a rate not consistent with fishing at F_{MSY}. To use this indicator to assess whether a particular fleet segment is in balance with its fishing opportunities could be wholly misleading.
Moreover, the SHI can give misleading results about the extent to which a fleet segment relied on over-harvested stocks and secondly, does not provide any indication as to the overall contribution a fleet segment makes to the overall catch from an over-harvested stock. Due to the calculation method, a fleet segment can have a SHI value (average F/F_{MSY}) below 1 even if one or more stocks was, in that year, harvested above F_{MSY}.

Indeed, previous STECF Balance EWG[10] and STECF plenary reports[11] repeatedly expressed concern about the usefulness of the SHI and the manner in which it was being estimated. The main issues highlighted by STECF in the past are:

- Quality checking of biological indicator calculations should take place before Balance EWG meetings;
- Databases with historical results of stock assessments for the Mediterranean, the Black Sea and Other Fishing Regions (OFR) are required to increase indicator coverage and to calculate indicator time-series for these regions;
- The SHI and its utility for assessing the balance between fishing capacity and fishing opportunities is not well understood;
- The SHI integrates information on the harvest rate of the stocks, the landings composition, and the prices of the various fish species, which makes it difficult to draw clear conclusions.
- The SHI may deliver a value of less than 1 for fleet segments which partly rely on individual stocks harvested at rates above F_{MSY}, hence masking instances of unsustainable fishing;
- The SHI may deliver a value of more than 1 for fleet segments which are not over-capacity with regards to their permitted harvest opportunities;
- The SHI may flag problems with a certain fleet segment despite the fact that the main problem lies with another fleet segment, which in turn may not necessarily be flagged;
- The limited number of fleet segments for which a representative indicator coverage can be achieved severely limits the usefulness of the SHI indicator.

It is further stated in STECF PLEN-13-01 '*STECF concludes that the added value of the sustainable harvest indicator to the indicators already in use is not clear at the moment. It would be useful to investigate the sensitivity of the indicator value to changes in the underlying developments and draw conclusions on the actual responsiveness and usefulness of this indicator. An evaluation of the value of this indicator will only be informative if it is based on concrete case study data*.' Such an investigation has not been carried out, however, the following simple hypothetical example illustrates how a misleading result of SHI can arise.

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[10] Scientific, Technical and Economic Committee for Fisheries (STECF) – Review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (STECF-12-18). 2012. Publications Office of the European Union, Luxembourg, EUR 25600 EN, JRC 76704, 84 pp.

Scientific, Technical and Economic Committee for Fisheries (STECF) – Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (STECF-13-28). 2013. Publications Office of the European Union, Luxembourg, EUR 26340 EN, JRC 86350, 140 pp.

[11] Scientific, Technical and Economic Committee for Fisheries (STECF) – 41st Plenary Meeting Report (PLEN-12-03). 2012. Publications Office of the European Union, Luxembourg, EUR 25579 EN, JRC 76701;

Scientific, Technical and Economic Committee for Fisheries (STECF) – 42nd Plenary Meeting Report (PLEN-13-01). 2013. Publications Office of the European Union, Luxembourg, EUR 25969 EN, JRC 81549;

Scientific, Technical and Economic Committee for Fisheries (STECF) – 44th Plenary Meeting Report (PLEN-13-03). 2013. Publications Office of the European Union, Luxembourg, EUR 26332 EN, JRC 86096, 124 pp

Consider the case presented in Table 2.7 below for the following two hypothetical fleet segments A and B.

Table 2.7 Hypothetical landings value by species in arbitrary currency units (CUs) for each fleet and the resulting SHI indicator values.

Reference year 20xx		Landings value by fleet segment	
Stock	F/FMSY	Segment A	Segment B
cod	1.3	10	100
haddock	0.9	8	500
whiting	1.2	2	50
plaice	0.8	0	400
sole	1.1	0	50
Total landings		20	1,100
SHI value		**1.13**	**0.92**

The resulting SHI values for fleets A and B are 1.13 and 0.92 respectively. This could be interpreted to mean that fleet A was more dependent on 'overfished' stocks than fleet B, where 'overfished' in this sense means at a rate that is greater than F_{MSY}. According to the F/F_{MSY} estimates, the stocks that were overfished in this illustration were cod, whiting and sole. The landings value of 'overfished' stocks by fleet segment A comprised 10 Currency Units (CU) for cod, 2 CU for whiting and 0 CU for sole, whereas the corresponding values for 'overfished' stocks by fleet segment B are 100 CU, 50 CU and 50 CU. The main issue to note is that, in this example, using the SHI to indicate that a fleet is out of balance with available fishing opportunities, may give rise to conclusions and even to an Action Plan to reduce the capacity of fleet segment A when in reality, most of the excess fishing mortality was being generated by fleet B. In such circumstances, if only fleet segment A was reduced in capacity, the net effect on F/F_{MSY} would be relatively small.

A further complication is that because the SHI is based on landings value, the impact of the catch of both fleet segments on the fishing mortality rate on the stocks that they harvest is ignored.

The simple example outlined above shows that using the SHI as an indicator to illustrate that a fleet segment may be out of balance with available fishing opportunities could give rise to inappropriate conclusions regarding balance, and subsequently to ineffective management action. As a result, EWG 14-21 considers that the use of the SHI as an indicator to inform on whether a fleet segment may have been of out of balance with available fishing opportunities should be abandoned and replaced by two alternative indicators, the Number of Over-harvested Stocks (NOS) and the Economic Dependency Indicator (EDI), which are described below.

2.4.2 Stocks at Risk Indicator (SAR)

The Stocks at Risk indicator is a measure of how many stocks are being affected by the activities of the fleet segment that are biologically vulnerable – in other words, stocks which are at low levels and are at risk of not being able to replenish themselves and which are either important in the catches of the fleet segment or where the fleet segment is important in the overall effects of fishing on the stock. According to the 2014 Guidelines to Member States, if

a fleet segment has an impact on one or more stocks at high biological risk, this is an indicator of a potential capacity imbalance. If a fleet segment takes more than 10% of its catches taken from a stock which is at risk, this could be treated as an indication of imbalance.

2.4.2.1 Method of Calculating, Presenting and Assessing the SAR

The SAR indicator aims to count the number of stocks that are exploited by a fleet segment which are currently assessed as being at high biological risk. According the the definition of the SAR indicator in the 2014 Balance Indicator Guidelines, a stock at high biological risk means a stock which is either:

a) assessed as being below the B_{lim} biological level; or
b) subject to an advice to close the fishery, to prohibit directed fisheries, to reduce the fishery to the lowest possible level, or similar advice from an international advisory body, even where such advice is given on a data-limited basis; or
c) subject to a fishing opportunities regulation which stipluates that the fish should be returned to the sea unharmed or that landings are prohibited; or
d) a stock which is on the IUCN 'red list'or is listed by CITES.

AND for which either:

1- the stocks make up to 10% or more of the catches by the fleet segment; or
2- the fleet segment takes 10% or more of the total catches from that stock.

This can be expressed, for each fleet segment catching n stocks of fish, as:

$$\sum_{i=1}^{i=n}(1\ if\ (Ci > 0.1Ct) or (\ Ci > 0.1Ti); otherwise\ 0)$$

where
Ci= catch, Ct = total catch of all stocks taken by the fleet segment, Ti = total catch of stock i taken by all segments, for n stocks that fall into any one of categories a) to c) above.
The following describes, step by step, how the indicator was calculated for consideration by EWG 14-12:

1. DCF landings data provided by MS were attributed to the relevant stocks. The stock reference list used in the calculation of the SAR indicator is provided in Annex I.
2. Selection of the stocks :
    a. Where B_{lim} and SSB data were available, and SSB<B_{lim}, the stock was selected for the relevant year
    b. The STECF report on Review of Scientific Advice - Consolidated Advice on Fish Stocks of Interest to the European Union for 2014 as well as stock assessment information from ICES, GFCM, or other RFMO reports were checked to identify stocks which are subject to:
        - Closure of fisheries;
        - Prohibition of direct fisheries;
        - Reduction of fisheries to the lowest possible level.
    c. TAC and quotas listings for each year were checked to identify stocks where the status is identified as RED – that is, 'the stock is outside safe biological

limits while not under a long-term plan, or is subject to a scientific advice that there should be no fishing.'

d. CITES listings for the classes Actinopterygii and Elasmobranchii were downloaded from the CITES Listed Species Database[12] and checked against DCF landings data submitted by MS.

3. Fleet segments where the total landed volume of a stock at risk is either greater than 10% of the total landed volume for all stocks landed by the fleet, or greater than 10% of the total landed volume for the stock at risk by all fleets in the relevant Area were identified.

The SAR calculation did not distinguish between fleet segments which did no land any stocks considered at risk, fleet segments for which landings data was not submitted by MS, and fleet segments for which landings data was submitted but other problems were encountered (e.g. a lack of information on fishing sub-regions in the case of France). A lacking SAR value in the MS balance indicator table does thus not necessarily mean that the fleet segment was not assessed. Instead the SAR values presented in the MS balance indicator table (see section 2.5 for link to table) need to be interpreted as follows:

SAR value is 1 or more

One or more stocks landed by the fleet segment are at high biological risk, and the stock(s) makes up more than 10% of the catches of the fleet, or the fleet takes more than 10% of the catches of the stock(s).

SAR value is 0

One or more stock(s) landed by the fleet segment are at high biological risk, but the stock(s) do not make up more than 10% of the catches of the fleet, and the fleet does not take more than 10% of the catches of the stock(s).

No SAR value (i.e. there is a dash '-'in the indicator table)

This can represent one of three possible situations:

1. The fleet segment did no land any stocks considered at risk;
2. The fleet segments could not be assessed due to a lack of landings data;
3. The fleet segment could not be assessed due to a problem with the submitted data.

In order to facilitate the interpretation of SAR indicator values, EWG 14-12 commented on SAR indicator values as follows to identify fleet segments where there is/are:

- *Lack of data*: Landings data unavailable for the entire time series 2008-2012
- *Insufficient recent data*: Data unavailable for one of more of the last 3 consecutive years in relation to the reference year 2012

SAR trends were not calculated due to the large number of issues and problems identified with the SAR (see sections 2.4.1.4 and 2.4.2.4).

2.4.2.2 SAR Data Availability and Reliability

[12] http://www.speciesplus.net/

Data quality was a major concern when calculating and attempting to interpret the SAR:

- No data on landings by species were available for Greece;
- Spanish data were available only for 2012;
- Information on fishing sub-regions were not always available for France for a part of the landings (an average of 27% from 2008-2012). These landings were taken into account for the total landings for the biological indicators calculation, but it was not possible to allocate them to a specific stock due to the lack of information on regions where catches were made.
- EWG 14-12 decided not to use 2013 SAR values since: (i) 2013 data were not available for all MS and (ii) previous experience has shown that landings data submitted by MS is in many cases incomplete and preliminary, and likely to be changed in subsequent data uploads. Data from France and Denmark for instance were not available for 2013.

2.4.2.3 Findings for the SAR

Due to the large number of issues and problems identified with the SAR (see sections 2.4.1.4 above and 2.4.2.4 below), the Expert Group considered that it would be inappropriate to draw any conclusions on the SAR indicator, or to assess SAR indicator trends.

2.4.2.4 SAR Issues Problems and Caveats

See also section 2.4.1.4 on general biological indicator issues, problems and caveats above.

According to the 2014 indicator guidelines (COM(2014) 545 final), '*if a fleet segment takes more than 10% of its catches from a stock which is at risk, this could be treated as an indicator of imbalance*'. The Expert Group considers that this is not necessarily true, but it can be used to indicate that a fleet segment may be worthy of further investigation to determine whether it is not in balance with its fishing opportunities.

The EWG 14-12 also discussed the threshold, and noted that the current 10% threshold is arbitrary. EWG 14-12 suggests that the SAR indicator threshold is tested in a future STECF Balance EWG by carrying out a sensitivity analysis, using different percentage thresholds as a cut-off point in order to investigate the impact of different thresholds (the same applies for the proposed NSR indicator threshold of 10%; see section 2.7).

Although the 2014 Balance Indicator Guidelines specify catch data should be used to calculate the SAR indicator, the calculations were based on landings data. This was due to the fact that the required catch data was not available to the experts calculating the indicator through an *ad hoc* contract. The lack of information on by-catch and discards is an important omission, constraining the usefulness of the indicator. EWGs 14/12 / 14-21 therefore consider that the use of landings data from the economic data call to calculate biological indicators which should be based on catch data is not appropritate and a separate (dedicated) data call could in future be requested. Alternatively future economic data calls should be altered to request all the data required for the calculation of the biological balance indicators.

With the exception of stocks assessed as being below the B_{lim} biological level, identifying and categorising 'stocks at risk' is subjective due to a range of terminology used in stock

advice. The Expert Group suggests in future to provide two versions of the SAR; one based on B_{lim} values (criterion a)[13] and a second based on criteria b-d given in the Guidelines. The details of these changes are detailed further in the section 2.7 on proposed changes to indicators.

In order to consider IUCN data in future (criterion d), the precise IUCN categories to be included in the SAR indicator calculations need to be specified. EWG 14-12 suggests that future SAR indicator calculations include landings data from all species categorised as threatened by IUCN, i.e. listed as 'Critically Endangered (CR)', 'Endangered (EN)' or 'Vulnerable (VU)' by IUCN[14].

Several species were recently added to CITES list (CITES Bangkok Meeting, 2013). Stocks of such species were not taken into account since the formal process was still ongoing when the SAR indicator was being calculated. Prior to calculating SAR indicator values in future, it needs to be ensured that the most recent CITES listing is used.

In addition to the IUCN Red List and CITES, species lists from other conventions (e.g. OSPAR and CMS, Barcelona Convention, etc.) could in future be considered. However the data sources underpinning the relevant species listings should be verified on a case by case basis. Once the calculation of the DCF Indicator 1 on 'Conservation Status of Fish Species' (CSF) proceeds beyond its current preliminary status[15], this could be a useful source of information for the calculation of the SAR indicator.

EWG 14-12 considers that a time consuming data gathering exercise would be necessary to include all these listings, and that such an exercise should be separated from the actual calculation of the indicator. In order to accurately calculate the SAR indicator in future, this information should be gathered and peer reviewed well in advance of the calculation of the SAR indicator. A continuously updated database with 'stocks at risk' could be established, made publicly available to ensure transparency, and used to provide the necessary input data for this indicator. Until an all the above aspects are taken into account EWG 14-12 / 14-21 considers that the calculation of the SAR indicator in its present form should not be continued. Instead only information on the Number of Stocks at Risk (NSR) based on criterion (a), i.e. stocks assessed as being below B_{lim}, should be considered although the implications of the NSR indicator values for different fleet segments need to be carefully considered (see section 2.7 on proposed changes to indicators below).

2.4.3 Return on Investment (ROI) or Return on Fixed Tangible Assets (RoFTA)

The Return on Investment (ROI) or Return on Fixed Tangible Assets (RoFTA) indicator compares the long-term profitability of the fishing fleet segment to other available investments. If this value is less than the low-risk long term interest rates available elsewhere, then this suggests that the fleet segment may be overcapitalised. If the return on investment or net profit is less than zero and less than the best available long-term risk-free interest rate,

[13] In 2012 only 10% of stocks selected for inclusion in the SAR indicator were stocks assessed as being below the B_{lim} level; 90% of the remaining stocks were selected based on the qualitative criteria (criteria b-d in the 2014 Balance Indicator Guidelines).

[14] http://www.iucnredlist.org/static/categories_criteria_3_1

[15] For further details see the following report: *ICES. 2013. Report of the Workshop on DCF Indicators, 21 - 25 October 2013, ICES Headquarters, Copenhagen, Denmark. ICES CM 2013/ACOM:38. 81 pp.*

this is an indication of long-term economic inefficiency that could indicate the existence of an imbalance.

2.4.3.1 Method of Calculating, Presenting and Assessing the ROI or RoFTA

Return on Investment (ROI)

ROI (also referred to as capital productivity) is the return of the investment divided by the cost of the investment. It measures profits in relation to the capital invested, i.e. indicates how profitable a sector is relative to its total assets. The higher the return, the more efficient the sector is in utilising its asset base.

When data on intangible assets (e.g. fishing rights, natural resource) are not available, the Return on Fixed Tangible Assets (ROFTA) is used as an approximation of ROI.

ROI is calculated as:

Net profit / (fleet depreciated replacement value + estimated value of fishing rights)

where,

Net profit = (Income from landings + other income + income from fishing rights) - (crew wage + unpaid labour + energy + repair + other variable costs + non variable costs + fishing rights costs + annual depreciation)

ROI is compared against a Target Reference point (TRP). For this exercise, the 5-year average of the risk free long-term interest rate for each MS was used.

Note: Indicators are not calculated if one or more of the essential cost and income items were not provided e.g. Net profit is not calculated if depreciated replacement value was not provided.

RoFTA* is calculated as:

Net profit* / (fleet depreciated replacement value);

where,

Net profit* = (Income from landings + other income) - (crew wage + unpaid labour + energy + repair + other variable costs + non variable costs + annual depreciation)

According to the 2014 Balance Indicator Guidelines, ROI is preferably used if it is available. When ROI is unavailable, then RoFTA should be used. In the case when both are unavailable, then Net Profit margin should be used.

ROI or RoFTA trends were calculated according to the filters detailed below for the years 2010-2012.

Table 2.8 Methodology used to automatically generate comments on ROI or RoFTA indicator trends.

Filter 1	Filter 2	Result
At least 3 consecutive years with data	Slope* >0.5	Increasing
	Slope* <-0.5	Decreasing
	-0.5<Slope*<0.5	No significant trend**
No time series of at least 3 consecutive years		No conclusion (Null value)

* The slope is calculated with the intercept of the trend line / the first value of the trend (a/i0)
** A threshold of 50% is use to indicate whether the value is significant or not.

EWG 14-12 commented on RoI and/or RoFTA indicator values as follows to identify fleet segments where there is/are:

- *Lack of data*: Data unavailable for the entire time series 2008-2012
- *Lack of data / cluster*: Data unavailable for the entire time series 2008-2012 due to clustering
- *Lack of data / I.*C.: Data unavailable for the entire time series 2008-2012 due to Inconsistent Clustering (I.C.)
- *Insufficient recent data*: Data unavailable for one of more of the last 3 consecutive years in relation to the reference year 2012
- *Insufficient recent data / cluster*: Data unavailable for one of more of the last 3 consecutive years in relation to the reference year 2012 due to clustering
- *Insufficient recent data / I.*C.: Data unavailable for one of more of the last 3 consecutive years in relation to the reference year 2012 due to Inconsistent Clustering (I.C.)

Fleet segments frequently need to be grouped together in clusters in order to deliver economic data that does not breach confidentiality requirements; fleet segments should only be clustered when the number of vessels in the fleet segment is too low to ensure confidentiality of sensitive economic data. As economic data is often only provided by the main fleet segment contained in the cluster, the other minor fleet segments in the cluster may not contain any data. As this may not be a case of missing data, in addition to '*Lack of data' and* '*Insufficient recent data'*, comments including '*Cluster' and 'I.C.' for Inconsistent Clustering* were also provided.

2.4.3.2 ROI or RoFTA Data Availability and Reliability

According to experts' opinion during the AER EWG 14-04 and EWG 14-05, several MS fleets were excluded from the time series analyses of the EU fishing fleet and trend analyses for reasons either related to the coverage, and/or quality of the data submitted. MS fleets that were excluded from time series analyses due mainly to incomplete datasets over the period 2008-2012 included: France, Spain and Greece. MS fleets that were excluded due mainly to questionable datasets included: Bulgaria, Croatia, Cyprus and Malta. Indicator values for these latter MS fleets should be considered with some caution.

An important further issue which hindered the interpretation of indicator trends were inconsistently clustered fleet segments throughout the time series. If clustering is inconsistent over time, any trends observed may be erroneous.

2.4.3.3 Findings for ROI or RoFTA

Overall, RoFTA trends were estimated for 197 fleet segments, of which 92 showed an increasing trend over the period 2010-2012, 97 fleet segments revealed a decreasing trend and 8 showed no significant trend.

In Area 27, the situation is globally characterised by fleet segments (n=365) for which no conclusion on trend in indicator values could be discerned. Of these 365 fleet segments, a large portion is due to fleet segments that have been clustered (n=121) and hence do not have indicator values (i.e. these are not necessarily cases of 'lack of data' or 'insufficient recent data' to assess trends). Furthermore, the number of fleet segments with no conclusion could be reduced significantly (n=126) if MS used a consistent approach to clustering over the time series in order to provide sensitive economic data under the DCF. Of the 142 fleet segments for which RoFTA trends were calculated, 67 showed an increasing trend, 69 showed a decreasing trend, and 6 showed no significant trend.

In Area 37, although data coverage of MS fleets is lower, the situation was similar to that in Area 27, with 21 fleet segments showing an increasing ROI trend, 26 a decreasing ROI trend and 2 fleet segments revealed no significant ROI trend.

Of the 507 fleet segments assessed over the period 2008-2012, ROI trends were calculated for 53 fleet segments, 29 of which showed an increasing trend, 17 a decreasing trend, and 7 showed no significant trend. No conclusion could be drawn on the remaining 454 fleet segments due to lack of (n=441) or insufficient recent data, often caused by inconsistent clustering over the time series.

No trends could be characterised for fleet segments operating in Other Fishing Regions (OFR).

Table 2.9 ROI or RoFTA trends per Area and MS – Numbers of fleet segments where ROI trends are increasing, decreasing, or not showing any significant trends, together with an indication of the number of fleet segments for which no conclusion was possible. Reasons for why no conclusion on trends was possible are also provided.

		RoI - Trends (2010-2012)				
Supra Region	MS	Increasing	Decreasing	No significant trend	No conclusion	No. of trend Obs.
AREA27	BEL				12	0
	DEU				26	0
	DNK	6	3	6	4	15
	ESP				67	0
	EST	3	1		7	4
	FIN				6	0
	FRA				113	0
	GBR	17	9		26	26
	IRL				45	0
	LTU				6	0
	LVA				6	0
	NLD	3	4	1	2	8
	POL				30	0
	PRT				65	0
	SWE				39	0
Total AREA27		**29**	**17**	**7**	**454**	**53**
AREA37	BGR				35	0
	CYP				8	0
	ESP				50	0
	FRA				72	0
	GRC				11	0
	HRV				54	0
	ITA				31	0
	MLT	4			26	4
	PRT				1	0
	ROU	2			13	2
	SVN				6	0
Total AREA37		**6**	**0**	**0**	**307**	**6**
OFR	DEU				3	0
	ESP				61	0
	EST				1	0
	FRA				25	0
	ITA				2	0
	LTU				2	0
	POL				1	0
	PRT				22	0
Total OFR		**0**	**0**	**0**	**117**	**0**
Total		**35**	**17**	**7**	**878**	**59**

		No Conclusion - RoI			
Supra Region	MS	Insufficient recent data	Insufficient recent data / cluster	Insufficient recent data / I.C.	Lack of data/NA
AREA27	BEL				12
	DEU				26
	DNK	4			
	ESP	5		1	61
	EST			1	6
	FIN				6
	FRA				113
	GBR				26
	IRL				45
	LTU				6
	LVA				6
	NLD		2		
	POL				30
	PRT				65
	SWE				39
Total AREA27		**9**	**2**	**2**	**441**
AREA37	BGR				35
	CYP				8
	ESP				50
	FRA				72
	GRC				11
	HRV	1	1		52
	ITA				31
	MLT	11			15
	PRT				1
	ROU		2	1	10
	SVN				6
Total AREA37		**12**	**3**	**1**	**291**
OFR	DEU				3
	ESP				61
	EST				1
	FRA				25
	ITA				2
	LTU				2
	POL				1
	PRT				22
Total OFR		**0**	**0**	**0**	**117**
Total		**21**	**5**	**3**	**849**

		RoFTA Trends (2010-2012)				
Supra Region	MS	Increasing	Decreasing	No significant trend	No conclusion	No. of trend Obs.
AREA27	BEL	1	5		6	6
	DEU	6	7		13	13
	DNK	7	8		4	15
	ESP				67	0
	EST	3	1		7	4
	FIN	4	1		1	5
	FRA	8	4	1	100	13
	GBR	18	8		26	26
	IRL	2	5		38	7
	LTU	2	2		2	4
	LVA	2	2		2	4
	NLD	3	5	1	1	9
	POL	1	2		27	3
	PRT	9	15	2	39	26
	SWE	1	4	2	32	7
Total AREA27		**67**	**69**	**6**	**365**	**142**
AREA37	BGR	1	1		33	2
	CYP	2	2		4	4
	ESP				50	0
	FRA	2	6		64	8
	GRC				11	0
	HRV				54	0
	ITA	4	13	2	12	19
	MLT	8	2		20	10
	PRT				1	0
	ROU	2			13	2
	SVN	2	2		2	4
Total AREA37		**21**	**26**	**2**	**264**	**49**
OFR	DEU				3	0
	ESP				61	0
	EST				1	0
	FRA				25	0
	ITA		1		1	1
	LTU	1			1	1
	POL				1	0
	PRT	3	1		18	4
Total OFR		**4**	**2**	**0**	**111**	**6**
Total		**92**	**97**	**8**	**740**	**197**

		No Conclusion - RoFTA					
Supra Region	MS	Insufficient recent data	Insufficient recent data / cluster	Insufficient recent data / I.C.	Lack of data	Lack of data / cluster	Lack of data / I.C.
AREA27	BEL		1			5	
	DEU					13	
	DNK	4					
	ESP	24		5	9	1	28
	EST			1	1	5	
	FIN		1				
	FRA	22	1	19	23	3	32
	GBR					26	
	IRL	2	5		16	15	
	LTU					2	
	LVA			1			1
	NLD		1				
	POL	6		5	1	6	9
	PRT	10		13		4	12
	SWE					32	
Total AREA27		**68**	**9**	**44**	**50**	**112**	**82**
AREA37	BGR	1	1		11	10	10
	CYP					4	
	ESP	12		8	12	6	12
	FRA	11		11	19		23
	GRC					11	
	HRV	13	4	4	8	13	12
	ITA	6			6		
	MLT	15			5		
	PRT				1		
	ROU		2	1		4	6
	SVN	1		1			
Total AREA37		**59**	**7**	**25**	**62**	**48**	**63**
OFR	DEU					3	
	ESP	14	1	3	8	6	29
	EST				1		
	FRA	1			22		2
	ITA				1		
	LTU					1	
	POL				1		
	PRT	6		4	2	3	3
Total OFR		**21**	**1**	**7**	**35**	**13**	**34**
Total		**148**	**17**	**76**	**147**	**173**	**179**

2.4.3.4 ROI or RoFTA Issues, Problems and Caveats

Resource rent is perhaps the optimal indicator of the balance between fishing fleet and fish stocks, but in the absence of a measure of resource productivity, resource rent cannot be reliably estimated. Net profit as provided in AER EWG (i.e. including the opportunity cost of capital) can be used as a proxy for the resource rent generated by fisheries.

Return on Investment can only be considered an appropriate indicator of capital productivity when, in addition to tangible assets, the intangible assets are correctly estimated. It should be made clear to Member States via the revised guidelines (see Annex IV) that 'Income' for the calculation of 'Net Profit' includes 'Income from fishing rights'. Additionally, "Fishing rights costs" and "Estimated value of fishing rights" must also be included in the calculation of ROI.

2.4.4 Ratio between Current Revenue and Break-Even Revenue (CR/BER)

The ratio between current revenue and break-even revenue reflects the financial capability of businesses with vessels in a given fleet segment to continue operating on a day-by-day basis: does income equal or exceed the costs of pay for the crew and the fuel and other running costs for the vessel? If the ratio between current revenue and break-even revenue is less than one, this is an indication of short-term financial difficulty.

2.4.4.1 Method of Calculating, Presenting and Assessing the CR/BER

Current revenue to break-even revenue ratio (CR/BER) is calculated as:

Current revenue (CR) / Break Even Revenue (BER),

where,

CR = income from landings + other income

where,

BER = fixed costs / (1-[variable costs / current revenue])

and,

Fixed costs = non variable costs + annual depreciation

and,

Variable costs = crew wage + unpaid labour + energy costs + repair costs + other variable costs

'Long-term' CR/BER, including opportunity cost of capital, was also provided according to the 2014 Balance Indicator Guidelines (but not included in the Summary Balance Indicator Table) and calculated as above and where:

Fixed costs = non variable costs + annual depreciation + opportunity cost of capital

and,

Opportunity cost of Capital = real interest*capital asset value,

where,

real interest (r) = [(1+i)/(1+∏)] - 1;

where, i is the nominal interest rate of the MS in the year concerned and ∏ is the inflation rate of the MS in the year concerned

and,

Capital asset value = fleet depreciated replacement value

EWG 14-12 commented on CR/BER indicator values as follows to identify fleet segments where there is/are:

- *Lack of data*: Data unavailable for the entire time series 2008-2012
- *Lack of data / cluster*: Data unavailable for the entire time series 2008-2012 due to clustering
- *Lack of data / I*.C.: Data unavailable for the entire time series 2008-2012 due to Inconsistent Clustering (I.C.)
- *Insufficient recent data*: Data unavailable for one of more of the last 3 consecutive years in relation to the reference year 2012
- *Insufficient recent data / cluster*: Data unavailable for one of more of the last 3 consecutive years in relation to the reference year 2012 due to clustering

- *Insufficient recent data / I.*C.: Data unavailable for one of more of the last 3 consecutive years in relation to the reference year 2012 due to Inconsistent Clustering (I.C.)

As for the ROI or RoFTA indicator, fleet segments frequently need to be grouped together in clusters in order to deliver economic data that does not breach confidentiality requirements. Fleet segments should only be clustered when the number of vessels in the fleet segment is too low to ensure confidentiality of sensitive economic data. As economic data is often only provided by the main fleet segment contained in the cluster, the other minor fleet segments in the cluster may not contain any data. As this may not be a case of missing data, in addition to *'Lack of data' and 'Insufficient recent data'*, comments including *'Cluster'* and *'I.C.'* for *Inconsistent Clustering* were also provided.

No trends were evaluated for this indicator. EWG 14-12 considers that due to the volatile nature of some of the variables costs associated with fishing, these indicator values may fluctuate considerably from one year to the next and commenting on trends driven by the price of fuel for instance, does not necessarily help inform the assessment of fleet under- or over-capacity in relation to fishing opportunities.

For overall evaluation of this indicator over a period of time, it was instead noted in how many of recent years the CR/BER was below one.

2.4.4.2 CR/BER Data Availability and Reliability

According to experts' opinion during the AER EWG 14-04 and EWG 14-05, several MS fleets were excluded from EU level and/or trend analyses for reasons related to either the coverage and/or quality of the data submitted. MS fleets that were excluded due to incomplete time series data included: France, Spain and Greece. MS fleets that were excluded due mainly to questionable datasets included: Bulgaria, Croatia, Cyprus and Malta. Indicator values for these latter MS fleets should be considered with some caution.

As for the ROI or RoFTA indicator, an important further issue which hindered the interpretation of indicator trends were inconsistently-clustered fleet segments throughout the time series. If clustering is inconsistent over time, any trends observed may be erroneous. There was insufficient time to assess in depth all cases with inconsistent clustering during EWG 14-12 / 14-21 but probable cases of inconsistent clustering were flagged and contained within the categories '*Insufficient data / I.C.*' and '*No data / I.C.*'.

2.4.4.3 Findings for the CR/BER

<u>BEL</u>
The majority of CR/BER ratio calculated for Belgian fleet segements in 2008-2012 are less are less than 1 (20 are less than 0.9; 5 are between 0.9 and 1; 9 are greater than 1). In 2011 / 2012 four out of the seven assessed fleet segments were characterised by a CR/BER value below 1. Out of these four segments two (DTS VL1824 and TBB LV1218) have had a CR/BER indicator value below 1 since 2008.

<u>BGR</u>
There was no data available to calculate the CR/BER ratio for most of the Bulgarian fleet segments in 2008-2012. All segments for which the CR/BER ratio could be estimated have had an indicator value below 1 since 2010.

CYP

The majority of CR/BER ratios calculated for Cypriot fleet segments in 2008-2012 are less than 1 (15 are less than 0.9; 5 are greater than 1). Number of segments with a CR/BER below 1 in 2012 has increased compared to 2011. Two segments (DTS VL1824 and PGP LV1218) have values under 1 for CR/BER during the entrie period 2008 -2012.

DEU

German fleet segments with sufficient data to calculate the CR/BER, are characterised by fluctuating values of CR/BER in 2008-2012. Thirty five fleet segments have CR/BER values under 1 in 2008-2012, and thirty three fleet segments have values close to (between 0.9-1) or greater than 1. The total number of segments with value for CR/BER below 1 in 2012 has decreased compared to 2011. Two segments (PG VL1012 and DTS LV40XX) have CR.BER values under 1 during the entire period 2008 -2012.

DNK

The majority of CR/BER ratios calculated for Danish fleet segments in 2008-2012 are less than 1 (54 are less than 1; 10 are between 0.9 and 1; 20 are greater than 1). The number of segments with CR/BER values below 1 in 2012 has increased compared to 2011, from 8 fleet segments to 11 fleet segments. There are five segments (DRB VL1218, DTS VL0010, PGP VL0010, PGP VL1012 and PMP VL1012) which have CR/BER values consistently below 1 during the period 2008 -2012. Only one segment (DTS VL40XX) had CR/BER values above 1 during the same period.

ESP

The majority of CR/BER ratios calculated for Spanish fleet segments operating in Area 27 in 2008-2012 are above 1 (46 are less than 1; 52 are between 0.9-1 or greater than 1). However, the number of segments with value for CR/BER below 1 in 2012 increased compared to 2011, from 7 segments to 9 segments.

The situation of Spanish fleet segements operating in Area 37 for which sufficient data wa available to calculate the CR/BER is not very clear due to fluctuating values of CR/BER during the period 2008-2012. Thirty five fleet segements have CR/BER values under 1; 33 have values close to or greater than 1. The number of segments with CR/BER values below 1 in 2012 decreases compared to 2011, from 7 segments to 5 segments. There is one segment (DTS VL2440) in Area 37 which has CR/BER values below 1 during the entire period 2008 - 2012.

In 2008-2012 the majority of CR/BER ratios calculated for Spanish fleet segments operating in OFR are below 1 (36 are less than 1; 19 are between 0.9-1 or greater than 1). However, the number of segments with value of CR/BER below 1 in 2012 has decreased compared to 2011, from 7 to 5 fleet segements. The segment HOK VL1824 has a negative CR/BER during the entire period 2008-2012.

EST

The majority of CR/BER ratios calculated for Estonian fleet segments in 2008-2012 are above 1 (2 are less than 1; 18 are greater than 1). In fact Estonian fleet segement have no CR/BER ratios below 1 in 2010, 2011 and 2012. There is no data for an Estonian fleet segment operating in OFR (EST OFR DTS VL40XX).

FIN

The majority of CR/BER ratios calculated for Finnish fleet segments in 2008-2012 are above 1 (7 are less than 1; 22 are between 0.9-1 or greater than 1). There are no fleet segemnts with CR/BER below 1 in 2012. CR/BER values for the segment TM VL1824 have consistently been above 1 during the period 2008-2012.

FRA

The majority of CR/BER ratios calculated for French fleet segments in 2008-2012 are above 1 (38 are less than 1; 123 are between 0.9-1 or greater than 1). For four fleet segments (DFN VL1012, DRB VL0010, FPO VL0010 and PMP VL1012) the CR/BER ratio is consistently above 1 in 2008-2012.

Of the French fleet segments operating in Area 37 for which data was available to estimate the CR/BER indicator in 2008-2012, 36 are under 1; 33 are greater than 1. However indicator values fluctuate considerabley over the time series. In 2012 only 5 segments had a CR/BER indicator value below 1.

GBR

The majority of CR/BER ratios calculated for British fleet segments in 2008-2012 are above 1 (21 are less than 1; 109 are between 0.9-1 or greater than 1). The number of segments with CR/BER ratios below 1 has decreased from 5 segments in 2011 to 2 segments in 2012.

GRC

There was no data available to calculate the CR/BER indicator for any of the Greek fleet segments in 2008-2012.

HRV

Data was available to calculate the CR/BER indictor for Croatian fleet segments in 2011 and 2012. The majority of fleet segments were characterized by CR/BER ratios below 1 (24 are below 1; 9 are above 1). The number of fleet segments with negative CR/BER values in 2011 and 2012 stayed constant.

IRL

The majority of CR/BER ratios calculated for Irish fleet segments in 2008-2012 are above 1 (19 are less than 1; 36 are between 0.9-1 or greater than 1). The number of segments with CR/BER ratios below 1 has decreased from 6 segments in 2011 to 4 segments in 2012. The number of segments with CR/BER ratios below 1 in 2012 has decreased compared to 2011 from 6 segments to 4 segments.

ITA

The majority of CR/BER ratios calculated for Italian fleet segments operating in Area 37 in 2008-2012 are above 1 (21 are less than 1; 88 are between 0.9-1 or greater than 1). The CR/BER ratios was only below the threshold of 1 for 6 out of a total of 24 fleet segmeents for which the indicator was calculated in 2012. Only one fleet segment (DTS VL2440) had a CR/BER ratio below one during 2008-2012.

The only Italian fleet segment fishing in Other Fishing Regions (OFR) for which data was available to calculate the CR/BER indicator (ITA OFR DTS VL40XX) had positive ratios in 2008-2012.

LTU

The majority of CR/BER ratios calculated for Lithuanian fleet segments operating in Area 27 in 2008-2012 are above 1 (2 are less than 1; 18 are between 0.9-1 or greater than 1).
The only Lithuanian fleet segment fishing in Other Fishing Regions (OFR) for which data was available to calculate the CR/BER indicator (LTU OFR TM VL40XX) had positive indicator values in 2011-2012. There were no Lithuanian fleet segments with a CR/BER ratio below 1 in 2012.

LVA

Data was available to calculate the CR/BER indictor for Latvian fleet segments in 2009-2012. The majority of CR/BER ratios calculated for LTU fleet segments in 2009-2012 are above 1 (4 are less than 1; 12 are greater than 1). However, the number of segments with CR/BER ratios below the threshold of 1 in has increased from 0 segments in 2011 to 2 segments in 2012.

MLT

The great majority of CR/BER ratios calculated for Maltese fleet segments in 2008-2012 are below 1 (75 are less than 1; 8 are greater than 1). The number of segments with CR/BER ratios below 1 has decreased from 16 in 2011 to 9 in 2012. However it is important to note that these values relate to different fleet segments since data was not available for all fleet segements in 2011 and 2012. Indicator values calculated for 2011 and 2012 are thus not directly comparable.

NDL

The majority of CR/BER ratios calculated for Dutch fleet segments in 2008-2012 are above 1 (14 are less than 1; 33 are greater than 1). There are three segments (DRB VL10010, DTS VL2440 and TBB VL40XX) which consistently have CR/BER ratios above the threshold of 1 during the period 2008 -2012. The number of segments with CR/BER ratios below 1 in has increased slightly from 3 segments in 2011 to 4 segments in 2012.

POL

The majority of CR/BER ratios calculated for Polish fleet segments in 2008-2012 are above 1 (9 are less than 1; 29 are greater than 1). The number of segments with CR/BER ratios below the threshold of 1 in has decreased slightly from 2 segments in 2011 to 1 segments in 2012.

PRT

The majority of CR/BER ratios calculated for Portuguese fleet segments operating in Area 27 in 2008-2012 are above 1 (52 are less than 1; 122 are between 0.9-1or greater than 1). The number of segments with CR/BER ratios below the threshold of 1 in has increased slightly from 13 segments in 2011 to 14 segments in 2012.

The majority of CR/BER ratios calculated for Portuguese fleet segments operating in Other Fishing Regions (OFR) in 2008-2012 are above 1 (14 are less than 1; 24 are between 0.9-1 or greater than 1). The number of segments with CR/BER ratios below the threshold of 1 in has increased slightly from 2 segments in 2011 to 4 segments in 2012.

ROU

There was no data available to calculate the CR/BER indicator for most of the Romanian fleet segments in 2008-2012. Those segmenets for which data was available are preominanty characterised by indicator values above 1 (2 are less than 1; 14 are above 1). No ROU fleet segments had CR/BER ratios below the thresold of 1 in 2010, 2011 and 2012.

SVN

The majority of CR/BER ratios calculated for Slovenian fleet segments in 2008-2012 are below 1 (16 are less than 1; 8 are greater than 1). The number of segments with CR/BER ratios below the threshold of 1 in has decreased slightly from 3 segments in 2011 to 2 segments in 2012. However this is most likely due to the fact that no data was available to estimate the CR/BER ratio for one of the fleet segments which had a negative indicator value in 2011.

SWE

The majority of CR/BER ratios calculated for Swedish fleet segments in 2008-2012 are above 1 (16 are less than 1; 19 are greater than 1). The number of segments with CR/BER ratios below the threshold of 1 in has decreased slightly from 3 segments in 2011 to 2 segments in 2012. There are two segments (DFN VL0010 and DFN VL1012) with a CR/BER ratio below 1 during the entire period 2008-2012, and three fleet segments (DTS VL1218, DTS VL1824, and DTS VL2440) with a CR/BER ratio above 1 during the entire period 200-2012.

Table 2.10. Percentage MS fleet segments for which the CR/BER ratio was below / close to / or above the threshold of 1 in 2008-2012.

Green cells show the percentage of fleet segments with a CR/BR ratio >1; yellow cells show the percentage of fleet segments with a CR/BR ratio ≥0.9 but ≤ 1; red cells show the percentage of fleet segments with a CR/BR ratio <0.9. Percentages were calcluated in relation to the total number of fleet segments for which the CR/BER ratio could be calculated. Area 27 – Northeast Atlantic; Area 37 – Mediterranean and Black Sea; OFR – Other Fishing Regions; ND – no data, NA – not applicable.

Member State	2008			2009			2010			2011			2012		
BEL	100%	0%	0%	57%	29%	14%	29%	0%	71%	57%	29%	14%	57%	0%	0%
BGR	0%	0%	100%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
CYP	50%	0%	50%	75%	0%	25%	75%	0%	25%	75%	0%	25%	100%	0%	0%
DEU - Area 27	54%	0%	46%	46%	15%	39%	23%	0%	77%	77%	15%	8%	46%	15%	39%
DNK	71%	6%	23%	82%	6%	12%	56%	13%	31%	53%	20%	27%	58%	16%	26%
ESP - Area 27	64%	4%	32%	48%	4%	48%	40%	13%	47%	37%	5%	58%	43%	5%	52%
ESP - Area 37	75%	0%	25%	54%	13%	33%	50%	0%	50%	54%	0%	46%	31%	6%	63%
ESP - OFR	89%	0%	11%	75%	8%	17%	70%	10%	20%	41%	6%	53%	71%	0%	29%
EST	25%	0%	75%	25%	0%	75%	0%	0%	100%	0%	0%	100%	0%	0%	100%
FIN	33%	0%	67%	33%	0%	67%	0%	17%	83%	50%	0%	50%	0%	0%	100%
FRA - Area 27	13%	3%	84%	10%	10%	80%	47%	22%	31%	19%	19%	62%	26%	26%	48%
FRA - Area 37	47%	6%	47%	ND			56%	0%	44%	40%	10%	50%	36%	14%	50%
GBR	23%	0%	77%	12%	0%	88%	19%	0%	81%	19%	0%	81%	8%	4%	88%
GRC	ND			ND			ND			ND			ND		
HRV	NA			NA			NA			71%	0%	29%	75%	0%	25%
IRL	8%	8%	86%	40%	20%	40%	40%	0%	60%	50%	0%	50%	40%	0%	60%
ITA - Area 37	19%	14%	67%	14%	0%	86%	14%	0%	86%	23%	9%	68%	26%	9%	65%
ITA - OFR	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%
LTU - Area 27	25%	25%	50%	0%	0%	100%	0%	25%	75%	25%	0%	75%	0%	0%	100%
LTU - OFR	0%	0%	100%	0%	0%	100%	100%	0%	0%	0%	0%	100%	0%	0%	100%
LVA	ND			25%	0%	75%	25%	0%	75%	0%	0%	100%	50%	0%	50%
MLT	94%	0%	6%	100%	0%	0%	100%	0%	0%	100%	0%	0%	56%	0%	44%
NLD	0%	11%	89%	33%	0%	67%	40%	10%	50%	33%	11%	56%	40%	0%	60%
POL	57%	0%	43%	12%	0%	88%	11%	0%	89%	25%	0%	75%	17%	0%	83%
PRT - Area 27	23%	3%	74%	18%	9%	73%	31%	0%	69%	37%	3%	60%	41%	3%	56%
PRT - OFR	40%	0%	60%	29%	0%	71%	50%	0%	50%	25%	13%	62%	40%	0%	60%
ROU	33%	0%	67%	25%	0%	75%	0%	0%	100%	0%	0%	100%	0%	0%	100%
SVN	60%	0%	40%	80%	0%	20%	80%	0%	20%	60%	0%	40%	50%	0%	50%
SWE	57%	0%	43%	57%	0%	43%	43%	0%	57%	43%	0%	57%	29%	0%	71%

2.4.4.4 CR/BER Indicator Issues, Problems and Caveats

Annual changes in the value of Break Even Revenue for a fleet segment can be due to several factors. If this indicator is being used to contribute a more in depth assessment for example, Break Even Revenue could be estimated for different products (e.g. by species or fishing operation type - gear). It is possible that, within one enterprise, some operations make positive contribution margins while others are making negative contribution margins, and may in fact be greater.

2.4.5 Inactive Vessel Indicator

The Inactive vessel indicator describes the proportion of vessels that are not actually active at all in a MS (i.e. that did not fish at any time in the year). Under normal conditions, it can be expected that 10% or less of the vessels in a fleet segment should be inactive, which could be due to major repairs, refits, conversions or pending sales and transfers.

2.4.5.1 Method of Calculating, Presenting and Assessing the Inactive Vessel Indicator

The inactive vessels are split according to length classes. For each subgroup, the number of vessels, total GT and kW were provided per year.

If the proportion of inactive vessels is more than 20% (in number or in GT or in kW) within a MS, this could indicate some technical inefficiency.

Trends were assessed for the years 2008-2013.

Table 2.11 Methodology used to automatically generate comments on Inactive Vessel Indicator trends.

Filter 1	**Filter 2**	**Result**
At least 3 consecutive years with data	Slope* >0.1	Increasing
	Slope* <-0.1	Decreasing
	-0.1<Slope*<0.1	No significant trend**
No time series of at least 3 consecutive years		No conclusion (Null value)

* The slope is calculated with the intercept of the trend line / the first value of the trend (a/i0)
** A threshold of 10% is used to indicate whether the value is significant or not

EWG 14-12 commented on inactive vessel indicator values as follows to identify fleet segments where there is/are:

- *Lack of data*: Data unavailable for the entire time series 2008-2012
- *Insufficient recent data*: Data unavailable for one of more of the last 3 consecutive years in relation to the reference year 2012

Missing data may be due to the clustering of fleet segments. However, as the DCF transversal variables are requested by fleet segment, whether data was unavailable due to clustering (or inconsistent clustering) was not considered for this indicator and flagged only as either insufficient recent data or lack of data.

2.4.5.2 Inactive Vessel Indicator Data Availability and Reliability

Data for 2008-2013 are provided by all the MS except France and Greece. Denmark did not provide data for 2013.

2.4.5.3 Findings for the Inactive Vessel Indicator

For 6 MS (Bulgaria, Cyprus, Malta, Portugal, Romania and Slovenia), there is a high level of inactivity over the period 2008 to 2013 confirmed by all indicators (Number of vessels, GT and kW). For some MS, the situation according to the vessels' inactivity is deteriorating in 2013 compared to 2008-2012 (Lithuania, Portugal) or improving (Malta).

At the EU level, highest levels of vessel inactivity are encountered in small scale fleets, i.e. vessels measuring less than 12 m in overall length.

Table 2.12. Inactive Vessel Indicator – Inactive vessels per MS in % of number, GT and kW in 2008-2013

	% inactive vessels						% inactive GT						% inactive kW inactive				
	2008	2009	2010	2011	2012	2013	2008	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
BEL	3.9	8.0	5.6	6.7	4.7	3.6	2.6	6.2	5.4	9.5	5.2	3.6	6.8	5.3	9.3	5.3	2.9
BGR	68.1	53.8	48.6	56.9	66.0	41.7	42.7	26.8	26.6	33.9	41.8	25.0	37.6	37.8	45.7	51.1	34.0
CYP	61.1	49.0	31.0	30.3	37.9	36.7	44.7	40.9	36.6	52.3	69.5	52.9	60.3	31.7	31.7	44.1	37.1
DEU	27.6	27.9	28.4	26.3	26.3	25.9	4.2	6.4	4.9	4.1	4.8	9.2	9.4	9.3	9.2	9.8	11.9
DNK	35.7	36.5	38.9	39.8	25.1	ND	19.0	13.7	7.3	6.4	3.1	ND	17.4	13.1	11.8	7.4	ND
ESP	25.3	15.8	7.6	9.3	15.3	13.5	2.3	2.0	1.8	1.5	6.2	6.6	3.5	2.5	2.4	7.4	7.6
EST	1.4	2.3	1.4	1.2	1.1	0.5	20.2	25.4	22.3	12.4	12.9	1.2	17.8	14.7	8.9	8.7	2.1
FIN	1.3	1.4	1.2	1.0	0.7	0.5	8.3	8.4	6.6	4.3	3.0	2.4	5.4	4.5	3.6	2.2	1.8
FRA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GBR	30.7	29.7	29.9	28.1	28.5	30.5	10.7	10.9	11.1	9.1	6.9	10.3	16.5	16.3	14.7	13.6	15.1
GRC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HRV	NA	NA	NA	27.3	33.5	37.3	NA	NA	NA	20.6	26.7	30.5	NA	NA	25.9	26.6	30.5
IRL	9.3	9.1	9.2	9.0	8.1	8.0	13.3	14.8	12.5	23.1	14.8	14.5	17.4	15.6	19.5	15.6	15.1
ITA	10.4	2.6	2.7	2.0	2.2	2.2	2.4	2.0	3.9	0.8	3.2	1.1	6.2	2.1	5.2	6.4	5.9
LTU	50.0	43.4	46.1	39.8	31.1	36.5	28.6	15.8	18.7	5.4	5.4	33.3	18.5	22.3	10.2	9.4	34.4
LVA	ND	ND	ND	21.6	21.6	22.9	ND	ND	ND	16.1	0.9	1.1	ND	ND	16.5	3.6	2.7
MLT	46.6	29.9	23.7	41.7	26.0	25.6	32.5	28.4	46.2	46.8	24.0	19.7	27.2	23.3	33.8	21.9	21.0
NLD	17.5	20.1	20.0	22.8	24.6	26.6	4.1	4.5	4.6	5.0	4.2	4.5	6.8	7.3	8.4	7.8	8.2
POL	4.7	12.4	12.0	10.4	4.7	5.1	1.2	5.5	6.0	4.3	1.7	0.7	9.9	10.2	8.5	2.9	2.6
PRT	39.4	40.6	41.6	43.0	48.5	51.3	17.0	15.7	17.8	17.3	16.9	21.8	16.1	17.2	17.2	18.6	22.4
ROU	8.2	63.6	52.0	59.0	29.9	42.9	50.5	71.4	67.9	40.3	25.4	14.4	65.5	62.2	34.9	19.2	14.4
SVN	51.4	53.0	50.8	54.9	50.8	51.5	20.7	24.0	21.0	23.3	26.2	34.1	37.4	33.1	38.4	37.5	30.0
SWE	23.8	23.0	24.8	24.1	22.9	24.4	13.0	13.2	14.5	8.7	3.8	5.3	13.9	16.1	12.4	10.2	11.8

- For Belgium the number of inactive vessels in terms of numbers, GT and kW is lower in 2013 compared to the years 2009-2012.
- For Bulgaria, Cyprus and Malta the percentages of inactive vessels in terms of numbers, GT and kW are decreasing, but still exceed the threshold of 20%.
- The number of the inactive vessels for Germany is more than 20% but for kW and GT the values do not exceeded 10% for the period 2008 - 2012. Nevertheless there is a small increase in kW and GT of inactive vessels in 2013.
- There is no 2013 data for Denmark. The average values in percentage for the period 2008 - 2012 show a decreasing trend. Despite this decreasing trend the percentage still is above the 20% threshold.
- There is no clear trend for all the areas where the Spanish fishing fleet operates. 2013 values show a very small increase compared to 2012.
- France and Greece did not provide data.
- For the Great Britain, Netherlands, Portugal and Sweden the percentages of inactive vessel numbers exceed 20% during the period 2008 -2013. The values for GT and kW increase in 2013 compared to 2012.
- For Croatia average values for inactive vessels numbers, GT and kW are increasing, and exceed 20% for the period 2011- 2013.

- Estonia, Ireland, Italy and Poland show a relatively stable trend, with low values for inactive vessels.
- The values for the Lithuanian fleet show very low capacity use in 2013. Results could be explained with the big inactive capacity entry in the segment VL40XX metres. The segment VL0010 metres have the highest values for the number of inactive vessels but the values for GT and kW in the same segment are negligible.
- Romania does not show a clear trend during 2008 -2012 for the number of inactive vessels, but values for GT and kW shows a clear decreasing trend during 2009-2013.
- Slovenia has a high percentage of inactive vessels for the period 2008 – 2013.
- For Latvia the percentage of inactive vessels exceeds 20% from 2011 -2013. In 2013 compared to 2012 the values for GT increase and values for kW decrease.

Table 2.13 Inactive vessel indicator trends by MS – Number of inactive vessel length groups, by number of vessels, GT and kW, which are increasing, decreasing, or not showing any clear trends, together with an indication of the number of length groups for which no conclusion was possible over the time period 2008-2012.

	No. Inactive vessels - Trends (2008-2013)				
MS	Increasing	Decreasing	No significant trend	No Conclusion (insufficient recent data)	No. of trend Obs.
BEL		1	1	1	2
BGR		1		3	1
CYP	1	2	1	1	4
DEU		1	4	1	5
DNK		4	1	1	5
ESP	2	2	10	7	14
EST		1	2		3
FIN		3		2	3
GBR			6		6
HRV	5				5
IRL		1	4		5
ITA	1	1	3	2	5
LTU	2	3	1		6
LVA				3	0
MLT		3	2	1	5
NLD	4	1	1		6
POL	1	2	1	1	4
PRT	2		4		6
ROU	1			4	1
SVN	1	1	2		4
SWE	1	1	1	3	3
Total	**21**	**28**	**44**	**30**	**93**

	Inactive GT - Trends (2008-2013)				
MS	Increasing	Decreasing	No significant trend	No Conclusion (insufficient recent data)	No. of trend Obs.
BEL	1		1	1	2
BGR		1		3	1
CYP	1	3		1	4
DEU	1		4	1	5
DNK		3	2	1	5
ESP	3		11	7	14
EST		1	2		3
FIN		3		2	3
GBR		1	5		6
HRV	5				5
IRL	2		3		5
ITA			5	2	5
LTU		2	4		6
LVA				3	0
MLT		5		1	5
NLD		1	5		6
POL		1	3	1	4
PRT	3		3		6
ROU	1			4	1
SVN	3		1		4
SWE	1	1	1	3	3
Total	**21**	**22**	**50**	**30**	**93**

	Inactive kW - Trends (2008-2013)					
MS	Increasing	Decreasing	No significant trend	No Conclusion (insufficient recent data)	No Conclusion (Lack of data)	No. of trend Obs.
BEL	1		1	1		2
BGR		1		3		1
CYP	2	2		1		4
DEU	1		4	1		5
DNK		3	2	1		5
ESP	3	1	10	7		14
EST		2	1			3
FIN		3		2		3
GBR		2	3		1	5
HRV	4		1			5
IRL		1	4			5
ITA	1		4	2		5
LTU	2	3	1			6
LVA				3		0
MLT		4	1	1		5
NLD	4	1	1			6
POL	1	3		1		4
PRT	2		4			6
ROU	1			4		1
SVN	1	1	2			4
SWE	1	1	1	3		3
Total	**24**	**28**	**40**	**31**		**92**

2.4.5.4 Inactive Vessel Indicator Issues, Problems and Caveats

The number of inactive vessels is provided by length classes at national level; only some countries provide data by supra-region (Spain). No data on inactive vessels were provided by France and Greece. To make data comparable, all MS should provide data on inactive vessels by supra-region, as is required under the DCF (Appendix III of Commission Decision 2010/93/EU). Although vessels may be inactive, information from the fleet register should enable MS to determine the supra-region a vessel falls under.

2.4.6 Vessel Use Indicator (UTR - utilisation ratio)

The Vessel Use Indicator, also known as the Vessel Utilisation Ratio (UTR) concerns the average activity levels of vessels that did fish at least once in the year, taking account of the seasonality of the fishery and other restrictions. If the average activity level of vessels in a fleet segment is recurrently less than 70% of the potential, workable activity of comparable vessels, this could indicate technical inefficiency, unless it can be explained by other reasons, such as unexpected climatic or man-made events or emergency measures as foreseen in the new CFP.

2.4.6.1 Method of Calculating, Presenting and Assessing the Vessel Use Indicator

JRC provided 3 sets of values for this indicator: UTR per fleet segment based on max DAS (Days At Sea) provided by MS, UTR including clustered fleet segments based on max DAS provided by MS and UTR per fleet segment based on a common max DAS of 220. Because of the poor quality of the max DAS provided by some MS (see section on reliability), the EWG decided to assess only the last indicator, hereafter referred to as UTR-220.

UTR trends were calculated for the years 2008-2012 according to the filters detailed below.

Table 2.14 Methodology used to automatically generate comments on UTR indicator trends.

Filter 1	**Filter 2**	**Result**
At least 3 consecutive years with data	Slope* >0.1	Increasing
	Slope* <-0.1	Decreasing
	-0.1<Slope*<0.1	No significant trend**
No time series of at least 3 consecutive years		No conclusion (Null value)

* The slope is calculated with the intercept of the trend line / the first value of the trend (a/i0)
** A threshold of 10% is used to indicate whether the value is significant or not.

EWG 14-12 commented on UTR-220 indicator values in cases where there is/are:

- *Lack of data*: Data unavailable for the entire time series 2008-2012
- *Insufficient recent data*: Data unavailable for one of more of the last 3 consecutive years in relation to the reference year 2012

Missing data may be due to the clustering of fleet segments. However, as the DCF transversal variables are requested by fleet segment, whether data was unavailable due to clustering (or inconsistent clustering) was not considered for this indicator and flagged only as either insufficient recent data or lack of data.

2.4.6.2 Vessel Use Indicator Data Availability and Reliability

Although the quality of the variable 'average DAS' provided by MS per fleet segment was already checked by the EWG AER, some quality issues remained that were not corrected. There was clear evidence that the concept of 'maximum days at sea' is not clear for several MS, and that different methodologies are used to calculate this parameter. These unresolved issues justify the use of the UTR-220 indicator in this report.

2.4.6.3 Findings for the Vessel Use Indicator

Overall, UTR-220 trends were estimated for 269 fleet segments, of which 8 showed an increasing trend over the period 2008-2012, 12 fleet segments revealed a decreasing trend, and 249 showed no significant trend.

In Area 27, the situation is globally characterised by fleet segments (n=306) for which no conclusion on trend in indicator values could be discerned. Of these 306 fleet segments, a large portion is due to fleet segments that have been clustered and hence do not have indicator values (i.e. these are not necessarily cases of 'lack of data' or 'insufficient recent data' to assess trends). Furthermore, the number of fleet segments with no conclusion could be reduced significantly if MS used a consistent approach to clustering over the time series in order to provide sensitive economic data under the DCF. Of the 201 fleet segments for which UTR-220 trends were calculated, 6 showed an increasing trend, 5 showed a decreasing trend and 190 showed no significant trend.

In Area 37, although data coverage of MS fleets is lower, the situation was similar to that in Area 27; no conclusion on trends in indicator values could be reached for the great majority of fleet segments (n= 253). One fleet segment showing an increasing trend, 4 a decreasing trend and 55 fleet segments revealed no significant trend.

With regards to fleet segments operating in OFR, no conclusion on trends in indicator values could be reached for 109 fleet segments. One fleet segment showing an increasing trend, 3 a decreasing trend and 4 fleet segments revealed no significant trend.

Table 2.15 UTR-220 trends per Area and MS – Numbers of fleet segments which are improving, worsening, or not showing any clear trends, together with an indication of the number of fleet segments for which no trend analysis was possible.

		UTR - Trends (2010-2012)					No Conclusion - UTR	
Supra Region	MS	Increasing	Decreasing	No significant trend	No conclusion	No. of obs. On trends	Insufficient recent data	Lack of data
AREA27	BEL	1		7	4	8	4	
	DEU			13	13	13		13
	DNK			15	4	15	4	
	ESP				67	0		67
	EST			5	6	5	2	4
	FIN			6		6		
	FRA	1		15	97	16	77	20
	GBR		3	38	11	41	9	2
	IRL	3		21	21	24	10	11
	LTU		1	5		6		
	LVA			4	2	4	2	
	NLD			10		10		
	POL			4	26	4	11	15
	PRT	1		25	39	26	25	14
	SWE		1	22	16	23	10	6
Total AREA27		**6**	**5**	**190**	**306**	**201**	**154**	**152**
AREA37	BGR			7	28	7	27	1
	CYP				8	0	7	1
	ESP				50	0		50
	FRA			10	62	10	41	21
	GRC				11	0		11
	HRV				54	0	54	
	ITA		1	19	11	20	11	
	MLT	1	1	12	16	14	16	
	PRT				1	0		1
	ROU			4	11	4	9	2
	SVN		2	3	1	5	1	
Total AREA37		**1**	**4**	**55**	**253**	**60**	**166**	**87**
OFR	DEU				3	0		3
	ESP				61	0		61
	EST				1	0		1
	FRA				25	0	2	23
	ITA				2	0	2	
	LTU	1	1			2		
	POL			1		1		
	PRT		2	3	17	5	11	6
Total OFR		**1**	**3**	**4**	**109**	**8**	**15**	**94**
Total		**8**	**12**	**249**	**668**	**269**	**335**	**333**

2.4.6.4 Vessel Use Indicator Issues, Problems and Caveats

The use of the theoretical DAS of 220 is obviously non-relevant for some fleet segments where the fishing activity is seasonal. In order to address this problem MS should be asked to submit accurate information on maximum DAS. A clear methodology on how to calculate maximum DAS should be provided to MS in order to facilitate this. In the absence of accurate data on maximum DAS being submitted by MS the EWG recommends that fleet segments for which the theoretical maximum of 220 days at sea is not relevant are identified. For such fleet segments an alternative maximum should be defined for use in indicator calculations.

2.5 Indicator Values by Member State

The indicator values and trends by area and MS can be downloaded from:
http://stecf.jrc.ec.europa.eu/reports/balance

For each indicator there are brief conclusions relating to the availability and/or the reliability of the data, and where relevant trends over the period 2008-2012.

2.6 MS Comments on Balance Indicators from Annual Fleet Reports

All the quotes and page numbers given in sections 2.6.1, 2.6.2 and 2.6.3 below refer to the last updated English version of the national fleet reports made available to EWG 14-12 / 14-21. For MS which submit their fleet reports in English reference is made to the original MS fleet report, whilst for MS which submit their fleet reports in a language other than English, reference is made to the translated version of the report provided to STECF by DG Mare.

2.6.1 Issues with Biological Indicators

ESP - *calculation*

SHI – p. 34,

The Spanish authorities note that:

> *'An error occurs by assigning the OCC and NEP F etoile value to all OCC and NEP catches that have been made in 37.1.1; it should have only been applied to 25% of the catches for NEP (the % of NEP fished in GSA 5) and to 2% for OCC (only 2% of OCC fishing is in GSA 5). This fleet's catches would have to be studied separately for GSA 5 (Balearic Islands), which will be done in future reports. It clearly affects the poor OCC results for POTS and NEP results for trawlers.'*

EWG 14-21 considers that the MS has raised a valid concern and therefore that the calculation of the SHI may be inappropriate.

SAR Indicator – p. 53,

The Spanish authorities note that:

> *'This indicator is a measurement of how certain vulnerable stocks are being affected by the segment's fishing. If the stock makes up 10% or more of the catches by the fleet segment, or the fleet segment takes 10% or more of the total catches from that stock, this is an indication of imbalance; we consider that in the phrase 'if the stock makes up 10% or more of the catches by the fleet segment', this 10% is in relation to the total catches made by that segment (e.g. DTS VL24-40 in the North Atlantic) and not of all the 24–40 metre trawlers from the country's fleet (North Atlantic + Mediterranean + Other regions).'*

EWG 14-21 considers that the MS has a valid concern regarding the calculation and it is inappropriate to combine catches from FAO area 37 together with FAO 27 to calculate an indicator that is only pertinent to North Atlantic.

IRL - *calculation*

SHI & SAR – p. 10,

The Irish authorities note that:

> *'There are a number of examples where specific fleet segments have been shown to have SHI values greater than 1 that deserve consideration and possibly revaluation.*
>
> *For the IRE HOK VL1012 segment, the SHI indicates imbalance between a small scale jigging fishery for mackerel and the target species. This seems counter intuitive given that the mackerel stock is undergoing a period of strong growth and this fleet segment removes a very small percentage of the overall stock. Analysis of the spreadsheets available on the JRC website, shows that for this fleet segment, only one stock (nea-mac) is included in the indicator and that this stock is considered to be over-exploited which is not the case, fishing mortality on mackerel has been below Fmsy since 2009. It is therefore unclear why EWG 13-11 reached the conclusion that 'half of the assessed stocks harvested by the fleet segment are fished unsustainably in the most recent years'.*

EWG 14-21 considers that the MS has a valid concern regarding the calculation and it is unclear why the conclusion that 'half of the assessed stocks ….. are fished unsustainably' given that landings from this segment represent a very small fraction of the overall landing of North East Atlantic Mackerel. Furthermore, EWG 14-21 notes that there is a difference between the SHI estimates reported in EWG 13-11, those produced during EWG 14-04[16] sent by DG MARE to Member States for inclusion in the Member States' national reports on balance-capacity, and the most recent values submitted for consideration by EWG 14-21:

IRE HOK VL1012	2008	2009	2010	2011	2012	2013
EWG 13-11	LP	1.37	1.37	1.4	NA	NA
EWG 14-04	1.35 (LP)	1.49	1.49	1.4	1.4	1.4
EWG 14-21	1.27	1.13	1.09	0.94	0.85	0.87

ITA – *calculation & use*

SHI & SAR – p. 14,

The Italian authorities note that:

> *'The European Commission has provided an estimate of this indicator at FAO division level with regard to the Italian fleet segments (service contract concluded by the Commission). In this sphere, the assessments carried out at GSA level were taken into account. However, more than one stock is assessed in an FAO statistical division and therefore the landing values have been divided between the number of stocks. In the absence of information on the actual proportion which one stock of a particular species in an area accounts for, an equal distribution has been assumed. For the FAO 37 division, the mortality values from current fishing (Fcurrent) and Fmsy are those contained in the 'Review of Scientific Advice for 2014 – Consolidated Advice on Fish*

[16] Available for download from http://stecf.jrc.ec.europa.eu/reports/balance

Stocks of Interest to the European Union'. This document also contains a summary of the results of the GFCM SAC and STECF working groups.'

EWG 14-21 considers that the MS has a valid concern regarding the calculation given that there is a discrepancy between the assessment area and the spatial disaggregation of the available landings data.

Furthermore, Italy notes that:

'In 2013 the condition of taking the 60 % threshold into consideration, with regard to the proportion of landing values included in the indicator (proportion in relation to coverage), was met for fewer fleet segments than in 2012. This was primarily due to the lower number of assessments available for 2013. The landing value for these segments amounts to only about 9 % (including the value of segment PSVL40XX) of the landing value of the entire fleet, whereas in 2012 a value of 20 %, which was already rather low, was achieved.'

EWG 14-21 notes that the threshold value of 60% referred to in the Italian National Report should in fact be 40%. This error should not be apportioned to the MS, but is an artefact of unclear guidelines.

EWG 14-21 notes that the Italian National Report has raised a number of issued relating to the utility of the SHI in particular. These limitations are common across all MS and relate mainly to coverage, stability and comparability which can be driven by the presence or absence of a stock assessment and mismatches between assessment and reporting areas. These issues are discussed elsewhere in this report.

CYP – *recalculation of SHI*

EWG 14-21 considers that the recalculation of the SHI by Cyprus is appropriate given the limitations identified in their National Report.

DEU – *calculation & use*

SHI – p. 9,

The German authorities note that:

'Generally speaking, however, this indicator should be viewed critically, as the calculation relies on information from biology (usage status) and economics (prices of individual fish species) together with information about the composition of landings from the various segments, which makes the interpretation of the results, as regards the biological status of the resources used, more difficult. This, then, is neither a purely economic nor a purely biological indicator. However, as this indicator is presented as a biological indicator, it might seem as if the German fleet segments were putting the fished stocks at risk. The current fishing pressure (fishing mortality FC) is considered in relation to the fishing pressure that is regarded as optimal (fishing mortality FMSY), which appears to be a reasonable approach. This relation is then offset against the value (€) of the landings of the stocks and fleets, not against the weight of the landings. By using the landed weights, together with fishing pressure, it would be possible to draw conclusions about the influence of individual fleet segments on various stocks. By contrast, the highly dynamic prices of certain fish species make it more difficult to interpret biological influence.'

EWG 14-21 agrees with these concerns and has noted that in practice this indicator describes the economic reliance of a given fleet segment on stocks that are estimated to be fished at levels in excess of target fishing mortality (F_{msy}) and as such cannot be considered as purely a biological indicator (see section on SHI issues, problems and caveats elsewhere in the report).

SAR – p. 11,

The German authorities note that:

> *'The recalculation for 2013 revealed that of the three SAR stocks, at least one stock should indeed be deducted, as it does not meet the SAR criteria.'*

EWG 14-21 agrees noting that for North Sea cod, the ICES advice for 2013 estimated the stock status was above B_{lim} and there was no advice to cease fishing.

Furthermore, the German authorities note that for Greenland Cod and Blue Ling that catches of non-EU countries are not included in the STECF data set, which only included *landings* associated with EU fleets. EWG 14-21 considers that according the guidelines, the 10% threshold should relate to the total outtakes from the stock and furthermore, given that Germany, while contributing more than 10% of the total EU catch of blue ling contributes <10% to the total international landings. Therefore the blue ling should be removed from the SAR list. Due to a lack of sufficiently disaggregated Greenland cod catch data, it is not possible to determine whether German catches or landings contribute greater than 10% of the overall outtake from this stock.

<u>UK</u> – *calculation & use*

Intro – p. 1,

The UK authorities note that:

> '*The indicators have been checked and verified before use to the extent possible given the information supplied. These checks have identified two errors in the process – one specific to the UK and one affecting data for all Member States for 2011 for one indicator – details of these issues are included against the relevant indicator. As such it is requested that the Commission make available the full data processes for all the balance indicators to allow a full validation of processes*.'

EWG 14-21 considers that in the interests of transparency and given the discrepancies and issues identified, it appropriate that the individual data used and the indicator estimation process itself be made available to permit checking by individual MS.

SHI – p. 11,

EWG 14-21 notes that the UK has identified a potential issue with the calculation of the SHI for the fleet segment GBR HOK VL2440:

> *'This is because for this segment an error was identified in the Stocks At Risk indictor related to the mapping of Species-Stock used for both this and the Stocks At Risk indicator. It has not yet been possible to work this through to allow revised data for this indicator to be presented, but it is expected that this will move the indicator down to below 1 for this segment, and there are likely to be impacts for other fleet segments as well for the UK and possibly other Member States.'*

It is not possible for EWG 14-21 to examine the particular mapping of the species-stock, but notes that there is a potential problem with the SHI for this segment.

SAR – p. 13,

EWG 14-21 notes that the UK has identified a potential issue with the calculation of the SAR for a number of fleet segments:

> *'For example, for the Demersal Trawl and Seine fleet segment for vessels of 18 to 24m, of the 7 stocks this segment fished in 2013 that were classed as at risk, the catches of 6 of these together accounted for only 0.6% of the total catches by this segment. Similarly, for the Demersal Trawl and Seine fleet segment for vessels of 24 to 40m, of the 9 stocks this segment fished in 2013 that were classed as at risk, the catches of 8 of these together accounted for only 0.9% of the total catches by this segment. This means that this biological indicator is very much driven by the information used to make the scientific judgment on the state of stocks rather than the level of landings of the stocks in question for the fleet segment. It would thus be helpful to have an understanding from the Commission regarding the confidence that can be attached to the stock assessment data used to create the biological indicators.'*

It is not possible for EWG 14-21 to examine these particular issues, but notes that there is a potential problem with the SAR for these segments.

HRV – *indicator use*

SHI – p. 13,

The Croatian authorities note that:

> *'In terms of DFN fleet segment, although the biological indicator shows a discrepancy between the capacity and the status of the stocks, as the HRI is above 1 in all 3 years, it should be noted that this fleet segment is less than 6 meters LoA, using passive gears and operating in coastal waters almost exclusively. It is considered that albeit the indices show a discrepancy, this fleet segment is not in effect in imbalance, given the specific manner of operation of this fleet. As Mediterranean realities show that the fisheries are mostly composed of small units (in particular, this fleet segment contributes with less than 0.2% in total landings), this element of analysis is considered to be slightly misleading. Croatia shall continue to carefully follow the situation in this fleet segment in relation to stocks exploited.'*
>
> *'There are fleet segments for which indicators also point out to an imbalance, such as hook and line and miscellaneous active gears groups, but these fleets are considered highly local and operational in very restricted areas. As such, it might not be appropriate to use the indicators available, since averages calculated may be misleading in terms of comparison. Also, the technical and economic indicators have been calculated based on a short time series. Croatia shall follow closely these fleet segments to avoid that this situation leads to a negative impact on stocks.'*

EWG 14-21 notes that while the SHI indicator for this segment is >1, the landings associated with this fleet are low and therefore the activities of this fleet do not represent a significant biological impact on the stock.

NLD – *calculation and use*

SHI – p. 17,

The Dutch authorities note that:

> *'It should be noted that the calculation of this indicator depends on the availability of quantified scientific advice for the stocks in question. In cases where more than 60% of the value of the catch is made up of stocks for which values of F and Fmsy are unavailable the indicator is deemed to be unavailable (DG Fisheries and Maritime Affairs Guidelines). Additionally, at present the indicator is not weighted by the actual TAC the Netherlands obtains each year. We recommend that such an approach is considered in the future as the relative part of the fishing mortality caused by the Dutch fleet on a certain species can then be delineated.'*

EWG 14-21 considers that weighting by national quota allocation may be appropriate and should be considered as a weighting method for any new indicators. However this would require testing to assess the potential impacts of such an approach.

SVN – *calculation and use*

SHI – p. 27,

The Slovenian authorities note that:

> *'Nevertheless, we have some observation and concerns regarding the calculation of the Sustainable harvest indicator (SHI) by the STEFC. The Scientific Advisory Committee (SAC) of the GFCM established that there was a mistake in the reference points included in Recommendation GFCM/37/2013/1 for the anchovy and sardine stock in GSA 17 and raised some concerns regarding assessment models, assumptions and input data used for the assessment of the anchovy stock.'*

EWG 14-21 considers it appropriate that the SHI value should be reconsidered in light of the new information presented, and that this should be considered in the Number of Overfished Stocks (NOS) indicator (see section on proposed changes to indicators).

SAR – p. 28,

EWG 14-21 notes that the Slovenian authorities have raised two issues regarding the utility of the SAR indicator. These are issues have been raised by other MS and previously by STECF (see section on SAR issues, problems and caveats).

'The stock at risk indicator has the following further observed constraints:

- *It is difficult to apply to Mediterranean stocks as agreed reference points are not available. This does not preclude the possibility that some stocks are known to be at risk but combined with the status of catch data for Mediterranean stocks in the DCF, it makes it difficult to present a complete view of stocks in the area.*
- *Landings statistics used to calculate the stocks at risk indicator should ideally include landings from non-EU countries and from all fleets (e.g. all under 10m fleets), but such information is lacking in most cases, particularly in the Mediterranean. '*

BGR – *lack of data*

Bio indicators – p. 8

The Bulgarian authorities not that:

> *'The necessary biological information for 2013 was not collected due to failure to conduct research surveys in the Bulgarian Black Sea (according implementation of NDCP). Consequently the biological indicators – Sustainable harvest indicator and Stocks-at-risk indicator were not calculated.'*

EWG 14-21 notes that for the calculation of the SHI and SAR indicators survey data is not required and that both indicators have been calculated for Bulgaria under the *ad hoc* contract.

FIN – *lack of data*

Bio indicators – p. 9,

The Finish authorities note that:

> *'According to a report by the European Commission in 2012, STECF (Scientific, Technical and Economic Committee for Fisheries) had no data available to it on biological indicators. With regard to the Finnish fishing fleet and the fish stocks it utilises, there is at present no reliable data available on all fish stocks to provide biological indicators.'*

EWG 14-21 notes that for many of the stocks exploited by Finland, there are analytical assessments available and that both SHI and SAR indicators have been calculated for Finland under the *ad hoc* contract.

MLT – *lack of data*

Bio indicators – p.4,

The Maltese authorities note that:

> *'The sustainable harvest indicator was deemed to be unavailable for Malta. Malta attempted to calculate the indicator, using stock assessments carried out by STECF and GFCM (the fisheries commission relevant to the Mediterranean) based on data from 2007-2012. In each case, for every year, more than 40% of the value of each catch was made up of stocks for which values of F and Fmsy or F0.1 were unavailable.'*

EWG 14-21 notes that both the SH and SAR indicators were calculated for the Maltese fleet segments under the *ad hoc* contract.

2.6.2 Issues with Economic Indicators

In most cases, MS used economic indicators (ROI and/or RoFTA and CR/BER) as calculated during the STECF EWG 14-04 using data submitted by MS under the Data Collection Framework (DCF).

In cases where MS re-calculated the economic indicators, they sometimes faced difficulties to compile all the variables or to make indicators comparable over the period:

FRA p 21

'In view of the provisional nature of the data relating to replacement value and capital depreciation in the call for data issued on 21 January 2014 for this report:

- RoFTA could not be calculated for the French fleet segments;

- the calculation of CR/BER was slightly modified and did not make allowance for depreciation.'

ESP, p70 Annexes

Some issues when calculating the indicators:

o Not being able to calculate the indicator due to lack population in the stratum. This means that in some cases it is impossible to analyse trends in a stratum and all we can say is whether the result obtained for that year is acceptable or not.

° The existence of some strata in which certain data were missing, which distorted the value obtained, and even made it impossible to calculate. These data are depreciation and fixed costs. In order to avoid eliminating these strata from the study, this value has been imputed as the average from the other years.

° There are several strata that do not have personnel costs available.

MLT, p 19

It should be noted, however, that results for previous years can only be compared with difficulty. Prior reports calculated this indicator by including direct subsidies and excluding depreciation. As from 2013, however, direct subsidies have been excluded while depreciation has been included in the calculation for the indicator (as per the Guidelines for analysis of the balance between fishing capacity and fishing opportunities of 12th June 2014).

EWG 14-21 suggests that these issues on the difficulty to provide some economic variables under the DCF should be considered in future PGECON / DCF workshops and raised by the EWG for the AER.

Other comments claim the need to clarify the methodology provided in the 2014 guidelines and the full process for the calculation of economic indicators:

SWE, p 5

ROI: It should also be recalled that the total revenue includes not only the total landed value, but also revenue from trading in fishing rights and other revenue, meaning that the indicator is overvalued.

CR/BER: It should again be pointed out that labour costs do not include owners' withdrawals from sole proprietorships, meaning that the actual labour costs are in fact higher.

EWG 14-21 agrees with the need to clarify the methodology of the 2014 guidelines. Regarding the ROI calculation, it should be made clear that 'Other income' for the calculation of 'Net Profit' includes 'Income from the fishing Rights'.

Regarding the potential impact of labour costs calculation on the CR/BER, EWG 14-21 suggests that MS should clarify the way that they calculate economic variables provided under the DCF when they submitted data.

GBR, p 10

It is thus requested that details of the full processes and calculations made for the other indicators (economic and technical...) are released to allow further checks to be possible, as well as additional uses of the indicators.

EWG 14-21 notes that JRC provides data quality reports to MS after data submissions and before producing the STECF Annual Economic Report (AER). MS are encouraged to resubmit revised and corrected data; national chapters and AER draft report are circulated to MS experts before it is published.

SVN, p 29

Return on Investment (ROI): In case of this indicator Slovenia submits two sets of calculations and accompanying interpretations: calculations that were prepared by the STEFC and in addition calculations that were done for the purpose of this report by the Fisheries Research Institute of Slovenia. The latter calculations are submitted as we deem that the figures provided by the STEFC are way too high for which we fail to find suitable explanation.

EWG 14-21 notes that JRC checked the above mentioned indicator values with an expert from SVN during EWG 14-12 and errors were detected in the SVN calculations. However, no further feedback was provided to JRC.

2.6.3 Issues with Technical Indicators

In most cases, MS used technical indicators prepared by JRC and validated by STECF EWGs.

Comments on technical indicators included in MS Reports were in many cases related to the methodology used to calculate the vessel utilisation indicator, in particular with regards to issues on:

- The definition of the maximum days at sea considering that some fisheries are seasonal;

- The irrelevance of a threshold for indication of technical (in)efficiency in general or applied to some segments, namely the small scale segment fleets.

Several MS also report the strong heterogeneity of the level of activity within some segment fleets compromising any assessment of technical (in)efficiency.

BEL, p16

The comments relies on the 12-24 m beam trawl sector *:' The maximum number of days at sea is irrelevant, as the 270-day maximum applies to the entire Belgian fleet, and is, in practice, unachievable for the vessels in this smaller sector, partly as a result of weather conditions and the exchange of days at sea for fishing opportunities. A quota utilisation rate of around 80% is regarded as in balance for this more heterogeneous fleet segment.'*

DNK, p 12

Making strong conclusions about presence of technical overcapacity are difficult, because each fleet segment is not very homogeneous, thereby having a large variation in the maximum observed days at sea

FRA, p20

It should be noted that the second technical indicator is not presented for the segments in which vessels are less than 12 metres in length. The level of dependence on fisheries among owners of vessels in the length classes below 12 metres should be assessed more discerningly so as to take account of the higher degree of diversification.

GBR, p16

Given the highly variable nature of activity seen within each fleet segment within the UK fleet, the UK wished to take up the option of applying differential days at sea figures for certain segments.

HRV, p12

It should be noted that particularly in smaller fleet segments fishing activities do not represent the only source of income, and rarely are the main one. Due to this fact, in those segments even though the indicator shows values less than 0,7 it is considered that it is not really a sign of imbalance

IRL, p2

The technical indicators as currently set down do not allow for the highly diverse nature of the fleet or the range of natural variation within these segments. For example the polyvalent segment of the fleet is diverse, in terms of size of vessels, geographical spread of activity and species targeted. Also certain specified areas carry effort restrictions, or are subject to seasonal/monthly patterns. It is difficult when dealing with such a wide variety to compare them all on the same basis so while the assessment in relation to technical indicators has been carried out it cannot give an accurate picture until such time as these natural variations can be allowed for within the assessment.

SVN, p24

Figures below 0,7 can be seen especially in fleet segments with large proportion of small vessels. The majority of fishing vessels of the Slovenian fisheries sector are vessels engaged in small scale coastal fishing (92 % of all Slovenian fishing vessels are below 12 meters). For most of the Slovenian fishermen, fishing does not represent their main economic activity, it is not the main source of their income, but it is an additional, complimentary activity to other activities (such as tourism etc.), therefore fishing activity of many fishermen is rather low.

Most of the fish caught by Slovenian fishermen are migratory species which means that they occur in the northernmost part of the North Adriatic Sea, which is the fishing area of Slovenian fishermen, occasionally or seasonally. As a consequence, the fishermen must

adjust their fishing trips to the occurrence of these migratory species. Therefore there can be many periods during a year when they do not fish at all and many fishers try to engage in other gainful activities. For example, vessels using purse seines are mainly active only in period April-September

SWE, p8

The Commission's guidelines state that values continually below 0.7 must be considered as showing structural overcapacity. ... As regards smaller vessels (of less than 12m) that fish with passive gear, it should also be pointed out that these account for less than 3% of the total Swedish catch and often involve operators engaged in part-time fishing.

EWG 14-12 agrees that the use of the theoretical DAS of 220 for some fleet segments where the fishing activity is seasonal (due to target species or fishermen behaviour) is not appropriate. In order to address this issue MS need to submit accurate information on maximum DAS. A clear methodology on how to calculate maximum DAS should be provided to MS as part of the proposed revised guidelines (see Annex IV) in order to facilitate this.

In the absence of accurate data on maximum DAS being submitted by MS, the EWG recommends that fleet segments for which the theoretical maximum of 220 days at sea is not relevant are identified. For such fleet segments an alternative maximum should be defined for use in indicator calculations.

EWG 14-12 agrees on the irrelevance of technical use assessment for segments where vessel activities are strongly heterogeneous. In that case, MS should provide elements on this high variability.

2.7 Proposed Changes to Indicators

EWG 14-21 considers that the Sustainable Harvest Indicator (SHI) should be replaced by two indicators, one giving information on the Number of Overharvested Stocks (NOS), and an Economic Dependency Indicator (EDI). The Stocks at Risk (SAR) Indicator should be replaced by an indicator giving information on the Number of Stocks at Risk (NSR). The proposed changes to the indicators are explained in more detail below.

The NOS and NSR indicators calculated at fleet segment level should be presented together with information on (1) the number of stocks exploited by the fleet segment, and (2) on the number of these stocks for which fishing mortality and/or biomass reference points are assessed at national and international level (i.e. by STECF or the relevant RFMOs).

Number of Overharvested Stocks (NOS)

The NOS essentially indicates the number of stocks for which the ratio of F/F_{MSY} is greater than 1.0 (i.e. stocks that at a particular point in time are being fished at rates that are not consistent with MSY) that are exploited by a fleet segment, provided that the catch of that

fleet segment account for more than n%[17] of the total catches from that stock by all segments. This means that if a fleet segment takes a catch from a stock for which F/F_{MSY} is greater than 1.0, but that catch represents less than or equal to n% of the total catches from that stock, the stock would not be counted in deriving the indicator value for the fleet segment. A hypothetical example is given in the table below.

Derivation of the NOS for 2 hypothetical fleets A and B (all units are arbitrary)

Stock	F/F_{MSY}	Total catch (all fleets)	Catch fleet A	Catch fleet B	Catch proportion fleet A	Catch proportion fleet B	Count Fleet A	Count fleet B
cod	1.3	110	10	100	0.09	0.91	0	1
haddock	0.9	508	8	500	0.02	0.98	0	0
whiting	1.2	52	2	50	0.04	0.96	0	1
plaice	0.8	400	0	400	0.00	1.00	0	0
sole	1.1	50	0	50	0.00	1.00	0	1
NOS							**0**	**3**

The above example results in NOS values of 0 and 3 for fleets A and B respectively, indicating that fleet B plays a greater role than fleet A to the exploitation rates on stocks where F/F_{MSY} is greater than 1. Hence such an indicator is useful in that it can inform managers on which fleets might be suitable candidates for action in their quest to align their fleet capacity with available fishing opportunities. As with other indicators used in this report, the NOS cannot be used in isolation to indicate that fleet capacity is not in balance with available fishing opportunities.

In order to facilitate estimation of a time series for the number of over-harvested stocks (NOS), it would be useful to have access to a database on stock status (mean F by year, F_{MSY}, SSB, B_{lim} estimates etc.) for the Mediterranean and Black Sea as well as Other Fishing Regions (OFR). Such databases could be hosted by the relevant RFMOs, and would need to be frequently updated with results of the most recent analytical stock assessments available. Before setting up a fully functional database, GFCM, STECF and ICCAT working groups could be asked to complete a simple Excel template, which, after review by relevant bodies (GFCM SAC, STECF plenary etc.), could be made publicly available. A similar suggestion on setting up a database with information on stock status was made in the reports of previous STECF Balance EWGs 12-10 and 13-11.

One of the parameters required in the calculation of the NOS is total catches, i.e. catches made by all fleet segments exploiting a particular stock. In the case of stocks shared with third countries, catches made by non-EU fleets need to be considered. Such data is generally available in the relevant RFMO databases (e.g. ICES, FAO/GFCM capture production databases available online). However there may be instances where MS do not have access to the relevant data; data on total catches in the Mediterranean is only available up to 2011 and total catch data for some OFR stocks will be difficult to obtain. In such instances the

[17] The n% threshold is suggested as an arbitrary threshold aimed to eliminate fleet segments that catch very low levels of the stocks in question. N is expressed as 1 / Number of fleet segments, e.g. if the number of fleet segment is 100 the Threshold percentage would be 1%. If the number of fleet segments is 10, then the threshold would be 10%.

indicator could nevertheless be calculated based on total catches of all EU fleets exploiting the stock.

Number of Stocks at Risk (NSR)

With the exception of stocks assessed as being below the B_{lim} biological level, identifying and categorising 'stocks at risk' based on the methodology outlined in the 2014 Balance Indicator Guidelines is subjective. In 2012 only 10% of stocks selected for inclusion in the SAR indicator were stocks assessed as being below the B_{lim} level; 90% of the remaining stocks were selected based on the qualitative criteria (criteria b-d in the 2014 Balance Indicator Guidelines).

It is thus suggested to split the quantitative calculation of the SAR indicator based on B_{lim} values (criterion a) from the qualitative estimation of the SAR indicator (based on criteria b-d) in the future so the origin of the data behind SAR indicator values is clearer and the indicator is easier to interpret.

Economic Dependency Indicator (EDI)

The EDI essentially indicates what proportion of the landings value from a fleet segment is derived from stocks for which the ratio of F/F_{MSY} is greater than 1.0 (i.e. stocks that at a particular point in time are being fished at rates that are not consistent with MSY). A hypothetical example is given in the table below.

Derivation of the EDI for 2 hypothetical fleets A and B (all units are arbitrary)

Stock	F/F_{MSY}	Total value of landings (all fleets)	Landings value fleet A	Landings value fleet B	Value proportion fleet A	Value proportion fleet B	**Value proportion Fleet A (Overharvested Stocks)**	**Value proportion Fleet B (Overharvested Stocks)**
cod	1.3	110	10	100	0.50*	0.09	0.50	0.09
haddock	0.9	508	8	500	0.40	0.45	NA	NA
whiting	1.2	52	2	50	0.10	0.05	0.10	0.05
plaice	0.8	400	0	400	0.00	0.36	NA	NA
sole	1.1	50	0	50	0.00	0.05	0.00	0.05
Total			20	1100	**EDI**		**60%**	**19%**

NA: Not Applicable because F/F_{MSY} is not greater than 1

* The value proportion of fleet A is 0.5 for cod since fleet A has a total catch value of 20 units, of which 10 units are cod.

The EDI represents the cumulative proportion of the revenue from such stocks to that fleet segment. The indicator can be used to inform on how reliant a particular fleet segment is on the revenue obtained from stocks that are being exploited at a rate that is not consistent with MSY. As with other indicators used in this report, the EDI cannot be used in isolation to indicate that fleet capacity is not in balance with available fishing opportunities.

Social Indicators

The 2014 Balance Indicator Guidelines do not mention any social indicators. This is despite the fact that the new CFP Regulation (EC 1380/2013) states that the common guidelines may be developed by the Commission to indicate '*the relevant technical, social and economic parameters'*, and that these guidelines should be used in the preparation of MS reports on the balance between fishing capacity and fishing opportunities. Despite the exclusion of social indicators in the 2014 Balance Indicator Guidelines, eleven Member States took the initiative to nevertheless provide such indicators in their 2014 annual reports.

It was however not possible to reach agreement on the appropriateness of social indicators in the assessment of balance between fleet capacity and fishing opportunities for MS fleet segments during EWG 14-12 / 14-21 due to the very limited time available for discussion. Several variations of potential indicators were briefly considered, however, no agreement was reached as to the utility of any of the indicators presented. The Expert group suggests that an assessment of the utility of candidate social indicators be undertaken by the 2015 EWG on balance between fleet capacity and fishing opportunities.

2.8 Proposed New Version of Guidelines

Article 22 of the CFP (Regulation (EU) No 1380/2013 of 11 December 2013) prescribes that measures should be taken to adjust fishing capacity to achieve a stable balance with fishing opportunities. It also prescribes that Member States shall send to the Commission, by 31 May each year, a report on the balance between the fishing capacity of their fleets and their fishing opportunities. To facilitate a common approach across the Union, that report shall be prepared in accordance with common guidelines which may be developed by the Commission indicating the relevant technical, social and economic parameters.

The Expert group notes that the current 2014 Balance Indicator Guidelines prepared by the Commission (COM(2014) 545 Final) contain a number of inconsistencies and misleading statements, and proposes that a new version of the Guidelines should be produced taking account of the following points and with suitable review by appropriate scientific experts. A draft of the proposed new version of the guidelines is presented in Annex IV.

2.9 Discussion and Conclusions on Balance Indicators

Overall EWGs 14-12 / 14-21 note that there is a large number of fleets segments for which no assessment based on biological, economic, and / or technical indicators is possible. Poor data quality and coverage from a number of MS prevented the EWG from comparing country values due to the discriminatory impact on MS that have provided the relevant data. More comprehensive datasets are thus urgently required from Member States. These data then require quality assurance checks prior to use in the calculation of indicators. In addition there is a need to increase the number of stock assessments, and stock status databases should be established for the Mediterranean Sea and for stocks of interest to EU fishing fleets operating in OFR. A further factor which prevented the EWG from commenting on indicator values were limitations with the way several of the indicator had been calculated; current indicator calculations require substantial improvements to improve the reliability of the results.

EWGs 14/12 and 14-21 in particular have reservations over the calculation methods and validity of biological indicators SHI and SAR. The use of the Sustainable Harvest Indicator (SHI) to assess whether a fleet is out of balance with available fishing opportunities may be misleading and give rise to inappropriate or ineffective decisions. Specifically, EWG 14-21 considers that due the manner in which the SHI is calculated, Member State may propose an Action Plan to reduce the capacity of particular fleet segment on the basis of the SHI value, even though that fleet segment catches only a small proportion of a stock or stocks that is/are being exploited at rates greater than FMSY. Conversely, a fleet with a much greater catch of the stocks of concern, may be considered in balance simply because it has a broader catch profile of other species. With regards to the SAR EWGs 14-12 / 14-21 note that with the exception of stocks assessed as being below the Blim biological level, identifying and categorising 'stocks at risk' is subjective due to a range of terminology used in stock advice.

As a consequence EWG 14-21 considers that the current SHI should be discarded and replaced with the Number of Overharvested Stocks (NOS). The SAR indicator should be revised to only include stocks that are assessed as being below Blim biological level. The existing criteria (b), (c) and (d) used for the calculation of SAR should no longer be used in calculating the SAR. The revised SAR indicator should be renamed Number of Stocks at Risk (NSR). In addition, a new Economic Dependency Indicator (EDI) should be adopted as outlined in the section on proposed indicator changes above.

EWG 14-21 considers that these newly proposed indicators should be thoroughly tested and peer reviewed with regards to their properties, and their degree of sensitivity to the variables included in the calculation prior to the 2015 Balance EWG meeting. Such testing and peer reviewing should be done by a separate dedicated working group meeting. This working group should also assess the appropriateness of using indicators for fleet segments that are inconsistently clustered over the time series. Conducting these checks prior to the Balance EWG and making the reports publically available would allow experts to draw more valuable and reliable conclusions on MS fleet segments during the 2015 Balance EWG meeting, and also permit MS to evaluate the adopted processes and methodology used to calculate the indicators.

EWG 14-12 acknowledges that economic indicators were assessed by STECF AER EWGs prior to EWG 14-12, and concludes that it would be useful to have access to STECF AER EWGs' comments on data quality and reliably during Balance EWGs.

In addition to the issues with current indicators, EWG 14-21 identified a substantial number of ambiguities and issues with the Balance Indicator Guidelines issued by the Commission in September 2014 (COM(2014) 545 final). EWG 14-21 concludes that it is important that the Commission adopts and disseminates to MS new guidelines based on the draft version proposed by the EWG. Precise details of how the new proposed indicators are to be calculated will need to be included in these guidelines following a decision by DG MARE on which of the proposed indicators are to be adopted and included in the Reports from Member States on the balance between capacity and fishing opportunities.

In particular EWG 14-21 considers that the assertion that the biological indicators will allow an assessment of the imbalance between each fleet segment and the stocks that they rely on is not necessarily correct. To unequivocally draw a conclusion that a single fleet segment is in or out of balance with its fishing opportunities based solely on the values for the above indicators may be erroneous. It is not possible to definitively draw such a conclusion without taking into consideration additional factors. Instead all the indicator values (biological,

economic and technical) should be considered when assessing whether the capacity of a fleet segment might, in the years represented, have been out of balance with its fishing opportunity. The EWG considers that one single indicator value that exceeds the threshold for a particular fleet segment cannot be considered as evidence of over capacity or imbalance between fleet capacity and fishing opportunity. Furthermore, even when a full set of indicators is available for a fleet segment, it is not valid to draw a conclusion on balance based on the indicator values alone. Instead this is a cue for Member States to further investigate the fleet segment to ascertain whether there is a problem and the fleet is currently, or was recently, out of balance with its fishing opportunity. To reach a conclusion on balance requires the consideration of political preferences, cultural values and subjective judgements; it is not a technical or scientific question and cannot be based on a single indicator (see also similar comments in previous STECF reports, e.g. STECF Plenary 12-02[18] and STECF Plenary 13-01[19]).

Moreover, when considering future actions relating to the adjustment of fleet capacity in order to bring it into balance with fishing opportunity, MS must bear in mind that the current and near future balance is not necessarily the same as the balance situation as assessed in the most recent year for which data are available and upon which the indicators are based. Imbalance in the recent past does not necessarily imply the existence of imbalance in current or near future years. If balance might have improved in current or near future years due to increases in the fishing opportunity, reductions in fleet capacity, or a mix of both, then it might not be necessary to take any further policy action. Therefore in the development of management measures, MS should consider that the fleet capacity and the fishing opportunity are likely to have changed and therefore the balance situation will also have changed since the data were collected. The EWG also notes that the introduction of the Landing Obligation is likely to significantly alter the validity of indicators and action plans introduced by Member States prior to its implementation.

[18] Scientific, Technical and Economic Committee for Fisheries (STECF) – 40th Plenary Meeting Report (PLEN-12-02). 2012. Publications Office of the European Union, Luxembourg, EUR 25411, EN, JRC 73093, 124 pp.

[19] Scientific, Technical and Economic Committee for Fisheries (STECF) – 42nd Plenary Meeting Report (PLEN-13-01). 2013. Publications Office of the European Union, Luxembourg, EUR 25969 EN, JRC 81549

3 TOR 2 EVALUATION OF MEMBER STATE FLEET REPORTS

3.1 Scoring System

The working group assessed compliance with Article 22.2 of Regulation 1380/2013, as well as Articles 13 and 14 of Regulation 1013/2010 by using the scoring system that had been developed during SGBRE 09-01 and subsequent revisions (Report STECF-12-18). Table 3.1 shows the scoring system used, which is based on the elements of Article 14 (items 1A to 2 in Table 3.1) and Article 13 (item O in Table 3.1). The scoring system was largely as used in previous years and awards a score for providing the required information and a separate score for the quality of the information. Scores for providing the required information are weighted to reflect the experts' view of the importance of the elements included (present) in MS reports. The quality score is a reflection of the completeness, robustness and relevance of the information provided.

In the agreed scoring system, reports were awarded the maximum marks available for the inclusion of required elements, even if information was not complete. If the element in respect of 2013 was absent, the score was zero. If a MS included a required element but it related to the wrong year, the report would score zero for including that element.

Experts awarded specific scores for completeness, robustness and relevance and each elements could achieve a score of 0, 0.5 or 1, so that the total quality score could be between 0 and 3 for each required element.

As in 2013, experts decided to award additional points for structure for each required element of the report. Thus, for example, if item '1A.iii) Development in fleets', is not given a heading, and the content for this item is included under another heading, elsewhere in the report, that MS report would receive the marks for the item being present, but would score zero for structure of that required element. To allow for the possibility of variable and / or weak translation of reports, experts accepted headings that were slightly different in wording as along as the meaning was essentially the same as that required by the regulation.

Experts split into three subgroups to evaluate MS reports so it is possible that groups may have applied the scoring system differently. However the system was discussed in plenary so this risk is considered to be small. Last year's MS scores were also reviewed to try to ensure consistency of evaluation between years. If experts decided to award a different score for the 2013 MS report than was awarded for essentially similar content in previous years, the experts recorded an explanation of their rationale in awarding a different score and this is contained later in section 3.3 of this report, under notes on each MS report.

A quality score of 3, the maximum available score, does not necessarily mean that there is no room for improvement in the presentation of a required element in the report.

For required element 1.d.ii), if a MS included a heading in their report and indicated that there was no plan for improvement in their fleet management system, but this statement is in contradiction with what was declared in the previous section 'Summary of weaknesses & strengths of fleet management system', no points were awarded for presentation.

For required elements 1A, 1.B and 1.C. if a MS presented only a Table or Figures and no statement a score for being present was awarded, but the MS was penalised by losing points on quality.

With regard to element 1E, information on changes of the administrative procedures relevant to fleet management, MS reports were not penalised in terms of quality if there is a clear statement in the report which states that there were no changes in the administrative procedures relevant to the fleet management.

The requirement that reports should be 10 pages or less was interpreted to mean that the annual report covering the legally required elements should be 10 pages or less. If a report exceeded 10 pages only because it included non-required elements such as balance indicators, or an annex of detailed information, then the report was still awarded a point for being 10 pages or less.

According to the recommended structure of the SGBRE 10-01 report (7.5. Ideal information under each required element of the MS reports), the statement of MS opinion on the balance of capacity and opportunity for their fleets should be included in the section 2. Therefore, if a report doesn't follow this scheme, the corresponding score of structure is 0.

Table 3.1 Scoring system for evaluating Member States annual reports

Q	Element to be included	Maximum score available		
		Present	Structure	Quality
1A	i) Description of fleets	2	1	3
	ii) Link with fisheries	3	1	3
	iii) Development in fleets	3	1	3
1B	i) statement of effort reduction schemes	2	1	3
	ii) impact on fishing capacity of effort reduction schemes	3	1	3
1C	Statement of compliance with entry / exit scheme	2	1	3
1D	i) Summary of weaknesses & strengths of fleet management system	1	1	3
	ii) plan for improvements in fleet management system	2	1	3
	iii) information on general level of compliance with fleet policy instruments	1	1	3
1E	Information on changes of the administrative procedures relevant to fleet management	1	1	3
2	Report 10 pages or less?	1	n/a	n/a
O	Overall: does report assess balance between capacity & opportunity?	3	1	n/a
	Total possible scores:	24	11	30

3.2 Evaluation of Member State Annual Reports for 2013

Seventeen Member State reports in English version were received by EWG 14-12 and could thus be evaluated by experts against the requirements of Article 22 of Regulation 1380/2013, as well as Articles 13 and 14 of Regulation 1013/2010.

In Tables 3.7 and 3.8 only 22 MS reports are considered because Croatia was evaluated for the first time in 2013.

Figure 3.1 shows the overall improvement in quality and inclusion of required elements between 2008 and 2013. The calculation is based on the sum of scores as percentage of maximum scores and the percentage for 2013 is calculated for 22 countries. There is less variation between MS reports in terms of their completeness and quality compared to the previous years.

3.2.1 Completeness

Table 3.2 shows the scores per MS for inclusion of required elements in their annual reports (the 'Present' score). Table 3.5 ranks MS by their score for inclusion of required elements. A maximum of 24 points was available. Italy, UK, Belgium, Portugal, Cyprus, Denmark, Greece, Latvia, Netherlands, Romania, Spain achieved the maximum 24 points, while the minimum was 18 points for Sweden.
The total score for including the required elements was 93% in 2013 (Table 3.7). Compared to 2012, there was a slight increase of 2% for presence.

The scores for all sections in the MS reports increased or remained the same compared to the same sections in 2012. The sections with the biggest increases in the scores (approximately 5 %) are:

- 1A*iii) Development in fleets;*
- *1Bii) impact on fishing capacity of effort reduction schemes*;
- *1Dii) plan for improvements in fleet management system*;
- *1E Information on changes of the administrative procedures relevant to fleet management.*

3.2.2 Quality

Table 3.3 shows the Quality scores by MS for included elements in the annual reports; there is an improvement in quality compared to the 2012 reports. Table 3.6 ranks MS by their quality score for the required elements.

For 2013 the maximum points for quality is 30 points, because no points were awarded for the quality of the overall statement on balance. Experts did not assess balance indicators presented by MS in their annual reports. The reports of Germany, Estonia, Portugal, Denmark, Slovenia and UK achieved the maximum score of 30 points. Only four countries decreased compared to the previous year. Annual improvements in quality of reports are illustrated in Table 3.8 and Figure 3.1. The total score for quality was 84% in 2013 and 79% for 2012.

3.2.3 Structure

Table 3.4 shows scores awarded by experts to reflect the extent to which MS annual reports followed the report structure. Three MS reports: Spain, Portugal, France closely followed the recommended structure, reaching the maximum score. Experts find it very time consuming to identify the required elements with headings that do not reflect the material contained in those sections.

Table 3.2 Scores by Member State for inclusion of required elements in annual reports

Q	Required element of report	Max score	BELGIUM	BULGARIA	CROATIA	CYPRUS	DENMARK	ESTONIA	FINLAND	FRANCE	GERMANY	GREECE	IRELAND	ITALY	LATVIA	LITHUANIA	MALTA	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVENIA	SPAIN	SWEDEN	UK
1A	i) Description of fleets	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	ii) Link with fisheries	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	3	3	3	3	3	3	3	3
	iii) Development in fleets	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1B	i) statement of effort reduction schemes	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2
	ii) impact on fishing capacity of effort reduction schemes	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1C	Statement of compliance with entry / exit scheme and with level of reference	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
1D	i) Summary of weaknesses & strengths of fleet management system	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
	ii) plan for improvements in fleet management system	2	2	2	2	2	2	2	0	2	2	2	0	2	2	0	2	2	2	2	2	2	2	0	2
	iii) information on general level of compliance with fleet policy instruments	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	0	1
1E	Information on changes of the administrative procedures relevant to fleet management	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Report 10 pages or less?	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1
O	Overall: does report assess balance between capacity & opportunity?	3	3	0	3	3	3	0	3	3	0	3	3	3	3	3	3	3	3	3	3	0	3	0	3
Total scores:		**24**	**24**	**21**	**24**	**24**	**24**	**21**	**22**	**23**	**21**	**24**	**22**	**24**	**24**	**19**	**20**	**24**	**22**	**24**	**24**	**20**	**24**	**18**	**24**

Table 3.3 Scores by Member State for quality of required elements in annual reports

Q	Required element of report	Max score	BELGIUM	BULGARIA	CROATIA	CYPRUS	DENMARK	ESTONIA	FINLAND	FRANCE	GERMANY	GREECE	IRELAND	ITALY	LATVIA	LITHUNIA	MALTA	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVENIA	SPAIN	SWEDEN	UK
1A	i) Description of fleets	3	2.5	3	3	3	3	3	1.5	3	3	3	3	0.5	3	3	3	3	2.5	3	3	3	3	2.5	3
	ii) Link with fisheries	3	3	3	3	2.5	3	3	2	3	3	2.5	2	1.5	3	2.5	0	3	1.5	3	2	3	3	2	3
	iii) Development in fleets	3	2.5	3	3	3	3	3	2.5	2.5	3	1	2	1	2.5	3	3	2.5	2.5	3	2.5	3	3	2.5	3
1B	i) statement of effort reduction schemes	3	3	3	3	3	3	3	3	3	3	3	3	2	3	0	3	1.5	3	3	3	3	3	3	3
	ii) impact on fishing capacity of effort reduction schemes	3	0	3	3	3	3	3	2	3	3	2	0.5	1.5	2	1.5	3	2.5	3	3	2	3	3	0.5	3
1C	Statement of compliance with entry / exit scheme and with level of reference	3	3	3	3	3	3	3	1.5	2.5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1D	i) Summary of weaknesses & strengths of fleet management system	3	0	3	3	3	3	3	2	3	3	1	1	1	3	3	3	3	0	3	3	3	3	2.5	3
	ii) plan for improvements in fleet management system	3	3	3	3	3	3	3	0	3	3	1	0	2	3	0	3	1.5	3	3	3	3	3	0	3
	iii) information on general level of compliance with fleet policy instruments	3	0	3	0	2.5	3	3	1.5	3	3	1.5	1	2	1.5	0	3	3	0	3	3	3	3	0	3
1E	Information on changes of the administrative procedures relevant to fleet management	3	2	2.5	3	3	3	3	2.5	3	3	2.5	3	3	3	3	3	3	3	3	3	3	2	2	3
2	Report 10 pages or less?	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
O	Overall: does report assess balance between capacity & opportunity?	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total scores:		**30**	**19**	**29.5**	**27**	**29**	**30**	**30**	**18.5**	**29**	**30**	**20.5**	**18.5**	**17.5**	**27**	**19**	**27**	**26**	**21.5**	**30**	**27.5**	**30**	**29**	**18**	**30**

Table 3.4 Scores by Member State for structure of required elements in annual reports

Q	Required element of report	Max score	BELGIUM	BULGARIA	CROATIA	CYPRUS	DENMARK	ESTONIA	FINLAND	FRANCE	GERMANY	GREECE	IRELAND	ITALY	LATVIA	LITHUNIA	MALTA	NETHERLANDS	POLAND	PORTUGAL	ROMANIA	SLOVENIA	SPAIN	SWEDEN	UK
1A	i) Description of fleets	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	ii) Link with fisheries	1	0	1	1	1	1	1	0	1	1	0	0	1	1	0	0	1	0	1	1	1	1	0	1
	iii) Development in fleets	1	1	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	0	1	1	0	1
1B	i) statement of effort reduction schemes	1	0	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	0	1	1	1	1	0	1
	ii) impact on fishing capacity of effort reduction schemes	1	0	1	1	1	1	1	0	1	0	0	0	0	1	0	1	1	1	1	1	1	1	0	1
1C	Statement of compliance with entry / exit scheme and with level of reference	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
1D	i) Summary of weaknesses & strengths of fleet management system	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1
	ii) plan for improvements in fleet management system	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	1	1	0	1	1	1	1	0	1
	iii) information on general level of compliance with fleet policy instruments	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	1	1	1	1	1	1	1	0	1
1E	Information on changes of the administrative procedures relevant to fleet management	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Report 10 pages or less?	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
O	Overall: does report assess balance between capacity & opportunity?	1	1	0	0	0	0	0	0	1	0	0	1	0	1	0	1	0	1	1	0	0	1	0	0
Total scores:		**11**	**7**	**10**	**10**	**10**	**10**	**10**	**2**	**11**	**8**	**5**	**6**	**7**	**8**	**4**	**10**	**10**	**8**	**11**	**8**	**10**	**11**	**4**	**10**

Table 3.5 Ranked results for inclusion of required elements in MS reports.

2013 Scores for inclusion of required elements					
Member State	**2013 score**	**Max score**	**%**	**2012 score**	**Difference**
ITALY	24	24	100%	4	20
UK	24	24	100%	21	3
BELGIUM	24	24	100%	23	1
PORTUGAL	24	24	100%	23	1
CYPRUS	24	24	100%	24	0
DENMARK	24	24	100%	24	0
GREECE	24	24	100%	24	0
LATVIA	24	24	100%	24	0
NETHERLANDS	24	24	100%	24	0
ROMANIA	24	24	100%	24	0
SPAIN	24	24	100%	24	0
FRANCE	23	24	96%	24	-1
FINLAND	22	24	92%	19	3
IRELAND	22	24	92%	22	0
POLAND	22	24	92%	23	-1
GERMANY	21	24	88%	21	0
ESTONIA	21	24	88%	23	-2
BULGARIA	21	24	88%	24	-3
SLOVENIA	20	24	83%	23	-3
MALTA	20	24	83%	24	-4
LITHUANIA	19	24	79%	19	0
SWEDEN	18	24	75%	22	-4
CROATIA	*24*	*24*	*100%*	*n/a*	*n/a*

Table 3.6 Ranked results for quality of included elements in MS reports

2013 scores for quality of included elements					
Member State	**2013 score**	**Max score**	**%**	**2012 score**	**Difference**
GERMANY	30.0	30	100%	19.5	10.5
ESTONIA	30.0	30	100%	23.0	7.0
SLOVENIA	30.0	30	100%	24.5	5.5
UK	30.0	30	100%	28.5	1.5
PORTUGAL	30.0	30	100%	29.5	0.5
DENMARK	30.0	30	100%	30.0	0.0
BULGARIA	29.5	30	98%	30.0	-0.5
FRANCE	29.0	30	97%	23.0	6.0
CYPRUS	29.0	30	97%	27.5	1.5
SPAIN	29.0	30	97%	29.0	0.0
ROMANIA	27.5	30	92%	24.0	3.5
LATVIA	27.0	30	90%	25.0	2.0
MALTA	27.0	30	90%	26.5	0.5
NETHERLANDS	26.0	30	87%	23.5	2.5
POLAND	21.5	30	72%	26.0	-4.5
GREECE	20.5	30	68%	20.5	0.0
LITHUNIA	19.0	30	63%	15.5	3.5
BELGIUM	19.0	30	63%	19.5	-0.5
FINLAND	18.5	30	62%	18.5	0.0
IRELAND	18.5	30	62%	22.5	-4.0
SWEDEN	18.0	30	60%	16.0	2.0
ITALY	17.5	30	58%	5.5	12.0
CROATIA	*27.0*	*30*	90%	*n/a*	*n/a*

Table 3.7 Comparison of scores for inclusion of required elements between 2012 and 2013 MS reports

Scores for including required elements		2012 MS reports			2013 MS reports		
Q	Required element of report	Sum of scores	Summed score as % of max	sum of max scores	Sum of scores *	Summed score as % of max	sum of max scores
1A	i) Description of fleets	44	100%	44	44	100%	44
	ii) Link with fisheries	63	95%	66	63	95%	66
	iii) Development in fleets	63	95%	66	66	100%	66
1B	i) statement of effort reduction schemes	40	91%	44	42	95%	44
	ii) impact on fishing capacity of effort reduction schemes	63	95%	66	66	100%	66
1C	Statement of compliance with entry / exit scheme and with level of reference	44	100%	44	44	100%	44
1D	i) Summary of weaknesses & strengths of fleet management system	20	91%	22	21	95%	22
	ii) plan for improvements in fleet management system	34	77%	44	36	82%	44
	iii) information on general level of compliance with fleet policy instruments	19	86%	22	19	86%	22
1E	Information on changes of the administrative procedures relevant to fleet management	21	95%	22	22	100%	22
2	Report 10 pages or less?	18	82%	22	19	86%	22
O	Overall: does report assess balance between capacity & opportunity?	51	77%	66	51	77%	66
Total scores:		**480**	**91%**	**528**	**493**	**93%**	**528**

* Scores for Croatia excluded

Table 3.8 Comparison of scores for quality of included elements between 2012 and 2013 MS reports

Scores for quality of included elements		2012 MS reports			2013 MS reports		
Q	Required element of report	Sum of scores	Summed score as % of max	sum of max scores	Sum of scores *	Summed score as % of max	sum of max scores
1A	i) Description of fleets	49.5	75%	66	60.5	92%	66
	ii) Link with fisheries	47.5	72%	66	54.5	83%	66
	iii) Development in fleets	40.5	61%	66	57	86%	66
1B	i) statement of effort reduction schemes	43	65%	66	60.5	92%	66
	ii) impact on fishing capacity of effort reduction schemes	35	53%	66	50.5	77%	66
1C	Statement of compliance with entry / exit scheme and with level of reference	46.5	70%	66	64	97%	66
1D	i) Summary of weaknesses & strengths of fleet management system	35	53%	66	52.5	80%	66
	ii) plan for improvements in fleet management system	36.5	55%	66	49.5	75%	66
	iii) information on general level of compliance with fleet policy instruments	28.5	43%	66	46	70%	66
1E	Information on changes of the administrative procedures relevant to fleet management	46	70%	66	61.5	93%	66
2	Report 10 pages or less?	n/a	n/a	n/a	n/a	n/a	n/a
O	Overall: does report assess balance between capacity & opportunity?	n/a	n/a	n/a	n/a	n/a	n/a
	Total scores:	**408**	**79%**	**660**	**556.5**	**84%**	**660**

* Scores for Croatia excluded

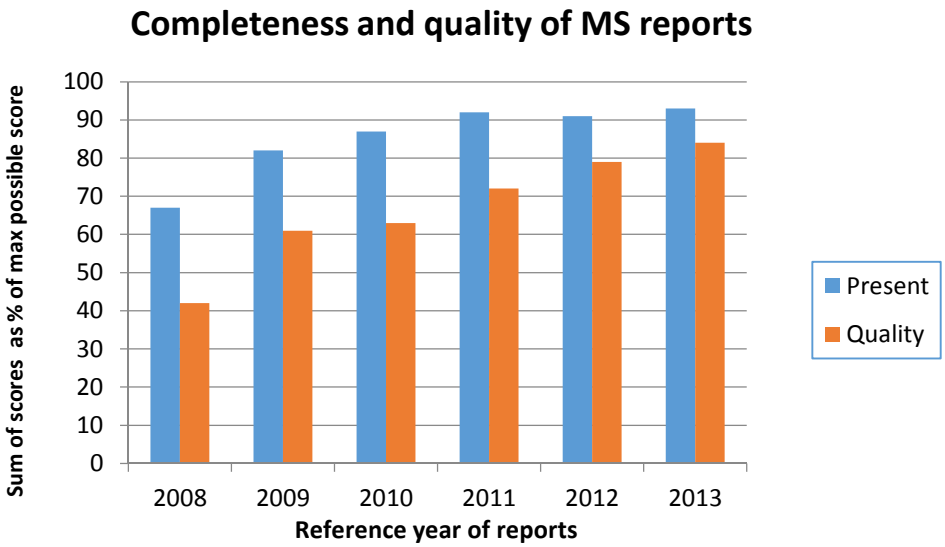

Figure 3.1 Annual development in MS sum of scores as percentage of maximum scores. Scores for Croatia are not included.

3.3 Comments on Member State Annual Reports

3.3.1 Belgium (BEL)

The headings of the sections in the report don't follow the recommended structure: information on 'Link with fisheries' and on 'Statement of compliance with entry / exit scheme' was provided in a section with a different header.

In the future BEL is encouraged to provide more detailed information for missing segments in the section 'Development in fleets'.

In the section on 'Impact on fishing capacity of effort reduction schemes', MS should give more explanations why there is no link between management of fishing effort and fishing capacity.

The section on 'Statement of compliance with entry / exit scheme' does not follow the recommended structure.

BEL should provide more detailed information about the 'Summary of weaknesses and strengths of fleet management system' and 'Information on general level of compliance with fleet policy instruments'.

Information on changes in the administrative procedures relevant to fleet management should be updated.

3.3.2 Bulgaria (BGR)

The report was clear and closely followed the recommended structure.

Information included in section 1E 'Information on changes of the administrative procedures relevant to fleet management' is more related to the information that should be included in section 'Information on the general level of compliance with fleet policy instruments'.

The section 'Balance between fleet capacity and fishing opportunities' should be included in the report; relevant conclusions should be provided.

3.3.3 Croatia (HRV)

Croatia delivered a comprehensive and good quality report.
The section 'Management plan for sardine and anchovy in GSA 17' should have a heading according to the recommended structure (i.e. statement of effort reduction schemes).
Croatia is encouraged to present more information about the compliance with the effort reduction schemes for next year.
Croatia did not provide any information on the general level of compliance with fleet policy instruments, for example with regards to control and enforcement or other administrative procedures. Croatia should present information about 'balance between fleet capacity and fishing opportunities' according to the recommended structure of the SGBRE 10-01 report.

3.3.4 Cyprus (CYP)

Overall the report was clearly presented and followed the recommended structure.
The section on 'Link with fisheries' could be improved by including a detailed table with information on landings by species and fleet segments.
More information regarding the 'General level of compliance with fleet policy instruments' will improve the quality of the report.
An assessment of the balance between fleet capacity and fishing opportunities is provided, but only for the main fleet segments.

3.3.5 Germany (DEU)

The section 'Information on fishing effort reduction schemes and their impact on catch capacity' should be presented separately in different paragraphs: one on 'Statement of effort reduction schemes' and one on 'Impact on fishing capacity of effort reduction schemes'.
The information about 'Changes to administrative procedures' should be moved to the section 1E 'Information on changes of the administrative procedures relevant to fleet management'.
The section 'Balance between fleet capacity and fishing opportunities' should be included in the report; relevant conclusions should be provided.

3.3.6 Denmark (DNK)

Overall the report was clearly presented and followed the recommended structure.
A comprehensive and detailed description of the fishing fleet was provided. Information about the 'Description of fleets' and 'Link with fisheries' could be improved by adding more information as was the case in previous years.
An assessment of the balance between fleet capacity and fishing opportunities was provided by DCF fleet segment using the traffic light system.

3.3.7 Estonia (EST)

The overall report quality improved compared to the previous years, and the recommended structure of the report was respected.
The section 'Balance between fleet capacity and fishing opportunities' should be included in the report; relevant conclusions should be provided.

3.3.8 Greece (GRC)

The recommended report structure was not always adhered to. Information on 'Description of fleets', 'Link with fisheries' and 'Development in fleets' was combined into one general section.

The table provided under ‘General description of the fishing fleet’ would be rendered more useful by including information from previous years. There is no information about catches/landings by the different fleet segments.
Greece is encouraged to include this data with the correct heading and in the correct section in future. For example ‘Statement of effort reduction schemes’ and ’Impact on fishing capacity of effort reduction schemes’ are not presented separately. Moreover, more robust information on ‘Impact on fishing capacity of effort reduction schemes’ will improve the quality of the report. Information in the section on ’Impact on fishing capacity of effort reduction schemes’ should be presented in tables and/or figures to make it easier to visualise the status of the Greek fleet.
Information about ‘Weaknesses and strengths of fleet management system’ is incomplete; some information on the ‘Fleet management system’ was provided but it is insubstantial. The same applies to the ‘Plan for improvements’ and the ‘General level of compliance with fleet policy instruments’. A more detailed account would be helpful.
Greece should present information about ‘Balance between fleet capacity and fishing opportunities’ in a relevant section.

3.3.9 Finland (FIN)

As in previous year the report did not follow the recommended structure.
More relevant qualitative and quantitative information on: the ‘Description of fleets’; ‘Link with fisheries’ and ‘Development of fleets’ should be included. The information should be presented by fleet segment, and include a short explanation.
In relation to the ‘Impact on fishing capacity of effort reduction schemes’ the period of data provided is not the same in the text and under Table 2.2. The information on reduction of capacity after 2009 is absent.
In the section on ‘Statement of compliance with entry/exit scheme’ there is missing information on the entries and exits at the end of 2013.
‘Summary of weaknesses & strengths of fleet management system’ is not clearly defined and the section ‘Plan for improvement in fleet management system’ does not provided relevant information.
‘Information on general level of compliance with fleet policy instruments’, would improve the overall quality and completeness of the report.
In the section on ‘Information on changes of the administrative procedures relevant to fleet management’ information about changes and administrative procedures should be included for the 2013.
Finland should present information about ‘Balance between fleet capacity and fishing opportunities’ in a relevant section.

3.3.10 France (FRA)

The section on ‘Link with Fisheries’ has improved following last year’s comments.
In the section ‘Development in fleets’ some figures of capacity trends would improve the quality of the report. The table with entries and exits should be included near paragraph 5 in section C on ‘Compliance with entry/exit scheme’.
The ‘Summary of weaknesses & strengths of fleet management system’ section was improved from last year’s report, but it is suggested to list ‘strengths’ and ‘weaknesses’ separately in future.
Additional information on other relevant measures could be included in the section on ‘Information on level of compliance with fleet policy instruments’.

3.3.11 Ireland (IRL)

The report had the same weaknesses mentioned last year. The report did not follow the recommended structure.

Information on 'Description of fleets', 'Link with fisheries' and 'Development in fleets' was combined into one general section, and information on the two latter aspects was missing.

A section on the 'Impact on fishing capacity of effort reduction schemes' should be provided following the report structure.

The sections: 'Weaknesses & strengths of fleet management system' and 'Information on general level of compliance with fleet policy instruments', should be provided according to the report structure. More robust information would improve the overall quality and completeness of the report.

No information was provided on 'Plans for improvement in fleet management system'.

3.3.12 Italy (ITA)

The overall quality of the report improved compared to last year. All the required sections were present in the Italian report. The report followed improvement recommendations made in the previous STECF EWG 13-28 report. However the report did not always follow the recommended structure.

The section 'Description of fleets' should be more detailed, and DCF segmentation should be applied.

Sections on 'Impact on fishing capacity of effort reduction schemes' and 'Statement of effort reduction schemes' were combined in one general section; these two sections should contain more detailed information.

Information on 'Summary of weaknesses & strengths of fleet management system', 'Plan for improvements in fleet management system' and 'Information on general level of compliance with fleet policy instruments' were combined into one general section. These sections should be more detailed and presented separately.

There is no general statement about the balance or imbalance between fleet capacity and fishing opportunity.

3.3.13 Latvia (LVA)

All the required sections were present in the Latvian report. The report followed some of the recommendations made in the previous STECF 13-28 report. However the report did not always follow the recommended structure.

Information on the 'Description of fleets' was complete and presented in the relevant section. 'Development of the fleet' should be described according to fleet segment and more substantial information should be provided.

The 'Impact on fishing capacity of effort reduction schemes' does not state or show the magnitude of the reduction of fleet capacity in terms of vessel GT or kW, only the number of vessels is provided. More information about capacity reduction should be provided.

'Weaknesses & strengths of fleet management system', 'Plan for improvements' and the 'General level of compliance with fleet policy instruments' were not given in the relevant order of the suggested structure.

Latvia is encouraged to also mention other relevant regulations in the section on 'General level of compliance with fleet policy instruments'.

There is no general statement about the balance or imbalance between fleet capacity and fishing opportunity.

3.3.14 Lithuania (LTU)

The report did not follow the recommended structure.

Information about fleet segmentation, gear and landed species should be provided. Some information about fishery was included in the '1.1 Description of fleet', but the section 'Link with fisheries' is missing from the report structure. This should in future be included with the correct heading.

The section 'Statement of effort reduction schemes' is absent.

The section 'Impact on fishing capacity of the effort reduction schemes' provided some information of reduction between 2005 and 2007. However there was no information on the impact of reduction schemes on capacity in 2012.

The section 'Statement of compliance with entry / exit scheme' should be provided according to the recommended report structure.

The sections 'Plan for improvements in fleet management system' and 'Information on general level of compliance with fleet policy instruments', were missing and should be included in the report with the relevant information.

3.3.15 Malta (MLT)

The report follows the recommended structure, but the section 'Link with fisheries' is missing.

The information about the balance between fleet capacity and fishing opportunities should be presented by fleet segments. Overall the assessment is too general; no clear conclusions are presented by the Maltese authorities.

3.3.16 Netherlands (NLD)

In the section 'Development in fleets', two tables were presented but with no accompanying comments. The relevant comments should be provided.

The section on 'Statement of effort reduction scheme' does not have clear information about effort. More information should be provided.

Tables are presented in the section on 'Impact on fishing capacity of effort reduction schemes', but again with no accompanying comments.

More explanation about plans for improvement should to be provided in the section 'Plans for improvement in fleet management system'.

There is no general statement about the balance or imbalance between fleet capacity and fishing opportunity.

3.3.17 Poland (POL)

The information provided on the 'Link with fisheries' is not sufficiently clear, robust and relevant because only limited information about landing volumes by species and fleet segment is provided by the POL.

Overall, POL is encouraged to present more detailed information, preferably by DCF segments.

3.3.18 Portugal (PRT)

The wording of the headings for 'Link with fisheries' and 'Statement of compliance with entry / exit scheme' was different from the headings suggested by the Guidelines. This seems to have been a translation problem and the EWG had suggested that the Commission could supply translators with the suggested report sub-headings for reference in future.

3.3.19 Romania (ROU)

The report followed the recommended structure only in the headings but not in the content.
The information provided on the 'Link with fisheries' was not robust enough, and most of the information was not given in the relevant section but was set out in an Appendix - without the provision of references in the appropriate section.
No relevant information was provided on the 'Impact on fishing capacity of effort reduction schemes'.
The information included in 'Development in fleets' should be moved to section 'Statement of compliance with entry / exit scheme' and information in 'Statement of compliance with entry / exit scheme' should be moved to the section on 'Impact on fishing capacity of effort reduction schemes'. Information about the development in fleets is dispersed in different sections of the report.
There is no clear concluding statement about the balance or imbalance between fleet capacity and fishing opportunities.

3.3.20 Slovenia (SVN)

The report followed the recommended structure.
The overall quality and completeness were improved compared to the previous year by the inclusion of more qualitative and quantitative information in particular with regards to Information on 'Weaknesses & strengths of fleet management system', 'Plans for improvement in fleet management system' and 'Information on general level of compliance with fleet policy instruments'.
There is no general statement about the balance or imbalance between fleet capacity and fishing opportunity.

3.3.21 Sweden (SWE)

The report did not follow the recommended structure provided in previous STECF reports, and does not follow the recommendations of the STECF EWG 13-28 report. Consequently the report is difficult to interpret.
Information about the 'Link with fisheries' is included in Table 2 and again in the text after Table 11; EWG 14-12 could not find any information on the 'Link with fisheries' by species and by fleet segment.
The development of active and inactive fleet is presented in separate tables presented in different parts of the report (Table 1 and Table 11).
Although there are statements of effort reduction schemes, there is no information regarding the 'Impact on fishing capacity of effort reduction schemes'.
More detailed information about the 'Summary of weaknesses & strengths of fleet management system' should be provided because the present information is very general. Detailed information is also lacking for the sections on 'Impact on fishing capacity of effort reduction schemes', and no information was provided for the sections on 'Plan for improvements in fleet management system', and 'Information on general level of compliance with fleet policy instruments'.
In the text on 'Information on changes of the administrative procedures relevant to fleet management' it is not clearly indicated whether there have been changes in the administrative procedures.
There is no general statement about the balance or imbalance between fleet capacity and fishing opportunity.

3.3.22 Spain (ESP)

Spain delivered a comprehensive and good quality report.

ESP should provide more information regarding changes in the section 'Information on changes in fleet management administrative procedures'.

3.3.23 United Kingdom (UK)

UK delivered a comprehensive and good quality report.

The appendix E. 'Results for balance indicators' includes separate tables for each calculated indicator and some of conclusions were made.

3.4 Discussion on Evaluation of Member State Fleet Reports

In line with the meeting TOR, EWG 14-12 and EWG 14-21 applied the scoring system that had been developed during SGBRE 09-01 and subsequent revisions (Report STECF-12-18) to evaluate the national annual fleet reports submitted by MS. This exercise revealed that there was a slight increase in overall provision of required elements in reports submitted in 2013, like in previous years there was an overall improvement in the quality of the required elements.

However EWG 14-12 and EWG 14-21 considers that the scoring system developed by STECF in previous years needs to be updated to address the requirements of the new CFP in general, and the 2014 Balance Indicator Guidelines (including any relevant future revisions of the Balance Indicator Guidelines as outlined in Annex IV) in particular. It is suggested that a specific TOR on revising the current scoring system should be included in a future STECF balance EWG so that a thorough revision of the scoring system can be undertaken, using the above considerations as a starting point.

EWG 14-12 and EWG 14-21 reflected on a number of key questions which in future need to be evaluated in order to determine whether MS national reports were made in accordance with the 2014 balance indicator guidelines:

1. Are biological & economic indicators (including alternative indicators developed by MS) included?

Two new requirements of the reformed CFP relate to the inclusion of (i) indicators referred to the Guidelines, and (ii) alternative indicators developed by MS should in future be added to the list of required elements in the scoring system for evaluation of MS annual reports.

2. Are indicators calculated at fleet segment level as defined in DCF?

DCF fleet segmentation should be followed by MS when analysing the balance between fishing capacity and fishing opportunities in line with the 2014 balance indicator guidelines[20]. If a different classification of fleets is used then these should be justified by the MS. EWG 14-12 and EWG 14-21 noted that in several cases the assessment of balance indicators

[20] Sections 2 and 8 of COM(2014) 545 final respectively state the following:
- *These guidelines aim to … use data collected according to the Data Collection Framework to facilitate comparisons and to avoid duplication of work.*
- *In order to avoid duplication of work and in order to keep consistency with other economic and biological data, the evaluations set out here should be calculated from data as collected and structured under the Data Collection Framework in force.*

presented in MS reports cannot be compared with the analysis of balance indicators based on JRC calculations since some MS opted to use different fleet classifications in their reports. A specific requirement relating to this aspect should be introduced and evaluated when reviewing annual MS reports in future.

3. Are separate annual assessment included for different regions, including for fleets operating in the outermost regions and for vessels operating exclusively outside Union waters presented?

Information on fleets operating in the different regions (Area 27, Area 37 and in particular outermost regions) should be provided by all MS which have fleets operating in several areas. Where biological and economic data are not available this should be clearly stated by MS together with an indication of any measures being undertaken to address such a lack of information.

4. Is a balance at fleet segment level assessed in a manner which allows instances of structural overcapacity to be identified?

MS are required to carry out an assessment of balance between capacity and opportunity at fleet segment level, based on the calculation of indicators in accordance with the 2014 balance indicator guidelines developed by the Commission. It is very difficult for MS which have a large number of fleet segments and/or fleets that are active in a range number of métiers (different species and/or areas) to come up with an overall conclusion on the balance between capacity and opportunity in their fishing fleet. Moreover the term 'structural overcapacity', as used in Article 22.2 of the new CFP (Regulation 1380/2013) does not appear to be defined.

The question 'Overall: does the report assess balance between capacity & opportunity?' in the previous scoring system should in future be changed to 'Does the report include relevant information about the balance between capacity & opportunity in MS fleet?'.

5. Has the Member State proposed an Action Plan for fleet segments where imbalance has been demonstrated?

Where an Action Plan has been proposed by a MS, a question on whether the information presented in an Action Plan is consistent with information in the MS fleet report could be included in the revised scoring system. The progress of implemented Action Plans should be clearly indicated in the fleet report each year.

3.5 Conclusions on Evaluation of Member State Fleet Reports

English versions of 23 MS reports relating to 2013 were available in English version for review by the EWG. Since Croatia was evaluated for the first time in 2013, only 22 MS reports were considered for comparison purposes with 2012.

Evaluation of MS reports relating to 2013 showed that there was a slight increase in overall provision of required elements in reports compared to reports relating to 2012. There was further overall improvement in the quality of the required elements in MS reports relating to 2013 compared the previous year. Of the 23 MS that submitted reports, 6 MS achieved scores

of 100% for the quality of the required elements, which is an improvement on last year's scores.

With regards to the overall conclusions, 18 MS provided information on whether their fleet was or was not in balance with its fishing opportunity during 2013.

Several MS noted discrepancies between indicators provided by the Commission and their own calculations when of indicators were recalculated by the relevant national authorities. EWG 14-21 considers concludes that the indicator estimates should be subject to peer review, and that MS should specifically be invited to validate the accuracy of the indicators or provide alternative values with data and explanations as required.

In order to avoid the repetition of the same comments made by STECF EWGs during the evaluation of MS fleet reports each year, EWG 14 12 and EWG 14-21 suggests that the Commission should request feedback from MS on comments made on their national reports, including confirmation of receiving STECF comments. Such feedback should be requested as soon as the STECF Balance EWG report is issued (i.e. following STECF autumn plenary), before MS begin drafting the report of the following year.

The scoring system developed by STECF in previous years needs to be revised to address the requirements of the new CFP; the new scoring system should reflect the 2014 balance indicator guidelines for analysing the balance between fishing capacity and fishing opportunities. Key questions to be addressed when revising the scoring system include:

- Are biological & economic indicators (including alternative indicators developed by MS) included & measured?
- Are indicators calculated at fleet segment level as defined in DCF?
- Is separate annual assessment included for different regions, including for fleets operating in the outermost regions and for vessels operating exclusively outside Union waters presented?
- Is a balance at fleet segment level assessed in a manner which allows instances of structural overcapacity to be identified?
- Has an Action Plan proposed by a Member State for the fleet segments where imbalance has been demonstrated?

A specific TOR on revising the current scoring system should be included in a future STECF balance EWG so that a thorough revision of the scoring system can be undertaken.

4 TOR 3 EVALUATION OF MEMBER STATE ACTION PLANS

4.1 Introductory Remarks for TOR3

The recent reform of the EU's Common Fisheries Policy (CFP[21]) obliges Member States to put in place measures to adjust the fishing capacity of their fleets to their fishing opportunities over time. Member States are required to do so by taking into account trends and based on the best scientific advice, with the objective of achieving a stable and enduring balance between fishing capacity and fishing opportunities (Article 22.1 of EC 1380/2013).

According to COM (2014) 545 Final, from now on, Member States shall prepare and include in their annual fleet reports an Action Plan for the fleet segments with identified structural overcapacity. The Action Plans will set out the adjustment targets and tools to achieve a balance, and a clear-cut timeframe for its implementation. Failure to make an annual report on the balance between fleet fishing capacity and opportunities, and/or failure to implement the Action Plan may result in the proportionate suspension or interruption of funding under the new European Maritime and Fisheries Fund[22] (Article 22.4 of EC 1380/2013).The evaluation of Action Plans conducted by STECF EWGs 14-12 / 14-21 considered the following points:

1. Consistency between fleet report and Action Plan;
2. Presence of a discussion about the cause of imbalance;
3. Examination of the adjustment targets;
4. Specification of tools to reach the adjustment targets;
5. Specification of a clear time frame.

STECF EWG 14-12 / 14-21 undertook its Action Plan evaluations against the 2014 Balance Indicator Guidelines (COM (2014) 545 Final). However as explained in sections 2.6.3 and 2.6.4, the Expert Group considers that the 2014 guidelines are in need of revision, and some of the indicators used to inform an assessment of the balance between fishing capacities and fishing opportunities should be replaced. The Sustainable Harvest Indicator in particular (see section on SHI issues, problems and caveats for details) is problematic and may be misleading. As a result, if Member States' assessments of whether a fleet segment is out of balance with fishing opportunities was based on the SHI, their assessments may be questionable and any associated action plan may be inappropriate or undesirable. In an attempt to assist the Commission and Member States, the Expert Group has drafted proposed revisions to the guidelines (see Annex IV) and considers that the indicators listed therein should be adopted to inform future assessments of the balance between capacity and fishing opportunities.

[21] Art. 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy

[22] Regulation (EU) No 508/2014 of the European Parliament and the Council on the on the European Maritime and Fisheries Fund

4.1.1 Cyprus (CYP)

An Action Plan that ends in 2020 was presented by Cyprus for the small scale inshore fishery (license categories A&B) that was considered imbalanced by the Cypriot authorities. The target set by Cyprus is to achieve balance of the fleet by 2020. The basic tool for achieving this is the permanent cessation of fishing activities, through the withdrawal of fishing vessels from this fleet.

4.1.1.1 Indicators and Fleet Segments Considered

The Action Plan proposed by Cyprus sets the adjustment targets and tools to achieve a balance for the vessels with polyvalent passive gears 0-<12m (small scale inshore fishery with category licenses A&B, CYP PG VL0012). The estimated SHI suggests that the fleet relies on stocks that are being exploited at rates exceeding those capable of delivering MSY; the stocks contributing to the indicator reach almost 30% of the value of landings. The RoFTA regarding the fleet segment is very low or negative and with a deteriorating trend, indicating economic over-capitalization, although the ratio CR/BER, suggested that the segment is profitable (6-<12m) in 2012. It is however important to note that the Cypriot authorities consider that the results of the CR/BER calculation should be treated with caution since the data used in the calculations is based on questionnaire surveys due to the absence of financial accounts.

4.1.1.2 Adjustment Targets and Tools

The adjustment targets and tools proposed are the withdrawal of an additional 55 small scale inshore vessels. The Action Plan also refers to the fact that a modification of the national fisheries law in Cyprus is ongoing, in order to provide the necessary legal framework for achieving the required fleet balance by 2020.

The Cypriot Action Plan states that: '*It is worth mentioning that the measure of permanent cessation started being implemented under the previous programming period (2007-2013), during which a number of 107 small scale inshore vessels were withdrawn; the aim is to complete this measure under the new programming period, with the withdraw of additional 55 vessels. In total, with the completion of the measure of permanent cessation, a reduction of at least 30% of the small scale inshore fleet is expected.'* There is no clear explanation of the rationale behind the percentage of vessels which is being targeted for scrapping.

4.1.1.3 Timeframes for Implementation

The time frame for implementation of the Cypriot Action Plan is clearly stated: actions to achieve balance between fishing capacity and fishing opportunities should be concluded by 2020. The Action Plan outlines the planned permanent cessation of 55 fishing vessels by the end of 2017, and a parallel modification of the national Cypriot fisheries law. Furthermore, it is stated that the MS will evaluate the Action Plan on an annual basis.

4.1.1.4 Conclusion on Assessment of Proposed Measures

STECF EWG 14-12 notes that the rationale for concluding that the fleet segment is over capacity is explained. However, while the tools to achieve the targets in the Action Plan are clear, the target number of vessels that are to be decommissioned is unclear. It is not obvious whether a total of 107 vessels have already been withdrawn under the 2007-2013 programme or whether only a number of the 107 vessels earmarked for withdrawal have been withdrawn. While the Action Plan aims to decommission 55 vessels by the end of 2017, it remains unclear whether this is in addition to or constitutes a proportion of the 107 vessels referred to in the 2007-2013 programme. The time frame for the permanent cessation of fishing vessels and the planned achievement of balance between fishing capacity and fishing opportunities are described. However the rationale behind the planned scrapping of 30% of the small scale inshore fleet segment is not explained.

4.1.2 Croatia (HRV)

An Action Plan that ends in 2019 was presented by Croatia for purse seine (PS) and demersal trawl (DTS) fleet segments, which the MS considers to be out of balance with fishing opportunities. The targeted reduction is expected to be achieved in 2019, following the application of EMFF measures for scrapping, and the application of other measures aimed to facilitate vessel exits from the fleet. STECF EWG 14-12 noted some inconsistencies between what is outlined in the fleet report and the Action Plan.

4.1.2.1 Indicators and Fleet Segments Considered

Croatia identifies overcapacity in some segments of the fleet and proposes to reduce capacity in the following segments: PS 06-12; PS-12-18; PS18-24; PS24-40; DTS 06-12; DTS -12-18; DTS 18-24 and DTS 24-40. The SHI value suggests that the fleets rely on stocks that are being exploited at rates higher than those capable of delivering MSY; the stocks contributing to the indicator represent around 80% of the value of the purse seine landings and 20% of the demersal trawl landings.

From the economic point of view, only 4 of these segments reveal no profitability, with negative values for DTS 12-18 m and 24-40 m length, and PS 6 - 18 m length. Regarding the fleet segment demersal trawlers 6 – 12 m length and purse seiners 18 – 24 m and > 24 m length, it appears that these segments have good economic viability. The same segments have ratios (CR/BER) above 1. Nevertheless, in the Action Plan proposes capacity reductions for two of these segments. However, STECF EWG 14-12 notes that the plan does not include any proposals for action for any of the other segments that based on the SHI rely on stocks that are being exploited at rates higher than those capable of delivering MSY and which show weak economic viability.

4.1.2.2 Adjustment Targets and Tools

The adjustment targets and tools proposed are the withdrawal of between 5% and 20% of the capacity of PS and DTS fleets VL 6-40 in terms of GT and kW (Table 1), and the general continuation of measures to manage the fishing effort deployed by the Croatian fleet.

Table 4.1 Targeted indicative reduction in the fleet.

Fleet segment		2013			Percentage of reduction	Targeted reduction	
		Nr. of vessels	GT	kW		GT	kW
DTS	VL00-06	7	8,7	37,46	0%	0	0
DTS	VL06-12	190	1.432,14	16.505,74	15%	214,82	2475,86
DTS	VL12-18	203	3.702,51	31.000,44	10%	370,25	3100,04
DTS	VL18-24	40	2.241,99	9.942,90	5%	112,10	497,15
DTS	VL24-40	16	2.581,83	7.384,40	5%	129,09	369,22
PS	VL00-06	3	3,38	89,15	0%	0	0
PS	VL06-12	34	230,64	3025,43	20%	46,1	605,09
PS	VL12-18	45	978,46	7338,69	10%	97,85	733,87
PS	VL18-24	54	4277,65	18352,6	5%	213,88	917,63
PS	VL24-40	67	9953,19	35941,64	5%	497,66	1797,08

4.1.2.3 Timeframes for Implementation

Although it is stated that the targeted reduction is expected to be achieved in 2019, the timeframes for implementation of the proposed measures are not clear.

4.1.2.4 Conclusion on Assessment of Proposed Measures

STECF EWG 14-12 noted that the measures proposed in the Croatian Action Plan do not consider the DFN segment, even though the SHI indicator is higher for this fleet segment compared to the PS fleet segments. The Action Plan justifies not considering the DFN segment for any action, stating that 'this fleet segment comprises only vessels less than 6 m LoA, operating seasonally and highly locally'. Moreover the Action Plan affirms that 'although the number of vessels is high and the catches low, the balance of this segment might in reality actually be higher than indicated'. The STECF EWG 14-12 notes that such justifications are likely to apply to the majority of Mediterranean fleets. Moreover, the Member State's assessment that the DFN fleet segment is in fact more in balance than what is indicated by the SHI is not supported by any data or additional indicator values presented in its fleet report.

STECF EWG 14-12 also noted that the proposed Action does not make a clear distinction between the use of EFF and EMFF funds for scrapping. It is not clear which part of the planned reduction in fleet capacity will be achieved under the EFF OP, and which part will be achieved under the EMFF Action Plan. Consequently the precise timeframe for the implementation of the Action Plan is not clear. The inference is that the Action Plan runs from 2015 until 2019, but this is not explicitly stated.

Taking into consideration the above observations, STECF EWG 14-12 concluded that further clarification is required to clearly understand exactly what is being proposed and the associated timeframe for implementation. Furthermore, the rationale behind the planned

scrapping of between 5% and 20% of the capacity of PS and DTS fleets VL 6-40 in terms of GT and kW is not explained.

4.1.3 France (FRA)

An Action Plan for fleet segments that based on technical, economic or biological criteria, or a combination of such criteria have been assessed by France to be out of balance was reviewed. STECF EWG 14-21 notes the following issues in the proposed Action Plan:

1. Despite the fact that the Action Plan recognises the need to use technical, economic or biological principles the only criterion the French assessment of balance is solely based on the Stock at Risk indicator (SAR);
2. The Action Plan also refers to a list of fleet segment that need to be monitored in a certain timeframe in order to identify whether these segments become demonstrably out of balanced over time. The time frame is however not clearly defined;
3. The Mediterranean fleet segments defined as *Gangui* are considered out of balance due to the implication of this fishing activity on the habitat (*Posidonia oceanica* beds), not based on an assessment done using the SAR indicator.

4.1.3.1 Indicators and Fleet Segments Considered

The Action Plan proposed by France sets adjustment targets and tools to achieve a balance for the Mediterranean and North Atlantic segments (less than 6, less than 10 and less than 12) targeting eel with different gears (pots, traps and nets) and Mediterranean fleets fishing on *Posidonia* beds (namely *Gangui*). The indicators taken into consideration are only biological; for *Gangui* in particular the biological indicator referring to the impact on the habitat of the stock targeted is not in agreement with the Commission guidelines. The assessment of balance by France for its fleet segments, does not take into account any technical or economic indicators.

Although an Ecosystem Based Approach to Fisheries Management as well as the agreement in the Barcelona Convention on the protection of *Posidonia* habitat has been taken into account by the French authorities in assessing *Gangui* fleet segments as candidates for action, the STECF EWG 14-21 notes that this metier is only allowed to operate under a specific derogation (Article 4 (5) of the Mediterranean regulation (No 1967/2006)). The provisions of that Article calls for a specific management plan and specifically does not allow the replacement of fishing vessels decommissioned with public aid. Consideration therefore needs to be given as to whether it is appropriate for the *Gangui* segment to form part of the proposed action plan.

4.1.3.2 Adjustment Targets and Tools

The adjustment targets and tools proposed are the withdrawal of a maximum of 212 vessels (177 targeting European eel and 35 using the *Gangui* gear). However the Action Plan does not specify the rationale behind the proposal to scrap 64% of the vessels in the fleet segment targeting European eel, and 29% of the vessels using *Gangui*.

Concerning those fleet segments targeting European eel, STECF EWG 14-21 notes that ICES 2015 advises that all anthropogenic mortality (e.g. recreational and commercial fishing, hydropower, pumping stations, and pollution) affecting production and escapement of silver eels should be reduced to – or kept as close to – zero as possible.

It is worth noting that the present Action Plan refers to secondary actions such as acquisition of knowledge and enhance use of available data, repopulation of European eel and prohibition of new entry into the fleets.

4.1.3.3 Timeframes for Implementation

The time frame for implementation of the French Action Plan is not clearly specified. The starting point and the end date of the Action Plan are unclear. The timetable only covers the timely implementation of the decommissioning scheme, and does not set any deadline for the completion of the Action Plan in its entirety. There is no tentative timetable for the secondary actions.

4.1.3.4 Conclusion on Assessment of Proposed Measures

STECF EWG 14-21 notes that the Action Plan does not clearly describe the reasons why an exit scheme is proposed only for those fleet segments identified in the action plan.
The rationale to base an assessment of whether there is imbalance between capacity and fishing opportunities solely on the SAR indicator is likely to result in some fleet segments that would be candidates for action being overlooked.

Furthermore, the sole reliance on biological indicators is potentially misleading and raises issues as to the validity of the analysis of the French fishing capacity. As indicated in the Commission Guidelines, 'the indicators are intended to be used in combination to draw conclusions on imbalance for each fleet segment separately'. In this Action Plan the indicators are not used in combination and therefore the conclusions reached as to which fleet segments are considered unbalanced are questionable.

The targets are not explained. The proposal would benefit from a clear explanation of the rationale behind the planned decommissioning schemes and the targets they are designed to achieve. Furthermore, the time frame for all the tools presented (permanent cessation of fishing vessels and other measures) is not clearly specified.

The French Action Plan also identifies an additional set of fleet segments that according to their assessment need to be monitored with respect to the balance between capacity and fishing opportunities. STECF EWG 14-21 notes that Member States are required to report annually on all fleet segments and not simply those specified in Member States' Action plans.

Taking into consideration the above observations, STECF EWG 14-12 concluded that further clarification is required to clearly understand exactly what is being proposed and why and the associated timescale for implementation.

4.1.4 Italy (ITA)

An Action Plan based on technical and biological criteria, or a combination of such criteria has been presented by Italy to identify fleet segments that are assessed by the Member State to be out of balance with their fishing opportunities. However STECF EWG 14-21 identified several issues in the Action Plan:

1. The only criterion taken into consideration in assessing whether fleet segments are in balance with their fishing opportunities is the Sustainable Harvest Indicator (SHI); The Expert Group considers that such an approach is not appropriate and may give misleading results (see section 2.4.1.5 / Annex IV section on indicator 'Purpose and Principles');
2. The Action Plan mentions an effort adjustment plan, but it does not specify effort reductions (it only generically mentions GT and kW decrease);
3. The reduction of 2% fishing capacity in term of GT/kW and the timeframe chosen are not justified.

The Action Plan also mentions other tools such as geographical and time-based closures, plans for temporary cessation of fishing activities and specific technical measures but without specifying segments, targets or timeframes.

4.1.4.1 Adjustment Targets and Tools

The adjustment targets and tools do not specify the number of vessels that would be scrapped. There is some specification in the Member State annual fleet report of the fisheries that would be affected by the reduction in capacity, but this is not mentioned in the Action Plan.

The Action Plan does not elaborate any justification for the proposal to scrap 2% of the GT/kW for the segments identified.

4.1.4.2 Timeframes for Implementation

The time frame for implementation of the Italian Action Plan is not entirely clear. The starting point and the end date of the Action Plan are clearly specified, but no intermediate steps or implementation targets are mentioned.

4.1.4.3 Conclusion on Assessment of Proposed Measures

STECF EWG 14-21 notes that the Action Plan does not clearly demonstrate the reasons why a capacity reduction scheme is required for the identified fleet segments.

The lack of any reference to indicators other than biological indicators is very problematic and raises issues as to the validity of the analysis of the Italian fishing capacity. As indicated in the Commission Guidelines, 'the indicators are intended to be used in combination to draw conclusions on imbalance for each fleet segment separately'. In this Action Plan the indicators are not used in combination and therefore the conclusions reached as to which fleet segments are considered unbalanced are questionable.

The Italian fleet report lists various problems with the calculation of the SHI, and states that: '*a decision has been taken to aggregate the segments on the basis of the SHI biological sustainability indicator assessment and to structure three separate action plans on the basis of these aggregated data'*. However no details on calculations based on such aggregated segments are presented, and no concrete proposals for improving SHI calculations are presented. In any case, the Expert Group considers that basing an assessment on the SHI alone is not appropriate and may give misleading results (see section 2.4.1.5 / Annex IV section on indicator 'Purpose and Principles').

A reduction of 2% in terms of fleet segment GT and kW is proposed for each of three fleet segments: (1) bottom trawling, (2) purse seining and pair trawling, and (3) other methods. This reduction target is however not justified by any concrete indicator calculations. Moreover as the report itself points out there is an existing fishing effort adjustment plan for the Mediterranean fleet, which is made up of 18 national decommissioning schemes separately structured according to geographical sub-areas (GSAs) and fishing methods. According to Table 5 in the MS fleet report the achieved reductions in GT and kW by fishing method and geographical sub-area (GSA) have in fact exceeded the planned reductions. Rather than presenting a justification why further decommissioning is required, the Italian authorities state in the Action Plan that '*the actions undertaken to date to bring the fleet back to a balanced situation have produced a result which, overall, may be considered reasonably satisfactory'*.

The targets listed in the Action Plan are presented without any explanation or justification; the proposal would benefit from a clear explanation of the rationale behind the planned decommissioning schemes and the targets they are designed to achieve. Furthermore, the time frame for all the tools presented (permanent cessation of fishing vessels and other measures) is not clearly set and should also be specified.

Taking into consideration the above observations, STECF EWG 14-21 concluded that further clarification is required to clearly understand exactly what is being proposed and why and the associated timescale for implementation.

4.1.5 Latvia (LVA)

Latvia presented an Action Plan for 2015-2017 in order to reach balance between the Latvian fishing fleet's capacity and the fishing resources available to the fleet. STECF EWG 14-12 noted an inconsistency between what is outlined in the fleet report and in the Action Plan regarding the precise number of vessels in the fleet segment that was considered by the Latvian authorities not to be in balance.

4.1.5.1 Indicators and Fleet Segments Considered

An imbalance in capacity and fishing opportunities was assessed by Latvia for the fleet segment Netters VL 24-40 m. The biological indicator (SHI) for this fleet segment was calculated in relation to the target fishing mortality based on the assessment done at WGBFAS2013 for Eastern Baltic Cod (F_{target} = 0.30). The Return on Investment (ROI) indicator is also reported in the Action Plan for VL 24-40m Netters. The ROI indicator shows low profitability. The causes of this in the ROI in 2012 and 2013 are explained as being the

result of low quota utilisation. However, the reasons for the low quota utilisation are not explained.

4.1.5.2 Adjustment Targets and Tools

With regards to adjustment targets and tools, the Action Plan proposes to eliminate the whole VL 24-40m Netters fleet segment.

4.1.5.3 Timeframes for Implementation

The Action Plan states that the exit (scrapping) of VL 24-40 m Netters is planned to be accomplished by the 31st December 2017.

4.1.5.4 Conclusion on Assessment of Proposed Measures

STECF EWG 14-12 notes that the proposed measure of the Action Plan are based on SHI calculated using the ratio of F/Fmsy based on the 2013 ICES assessment. As pointed out by STECF EWG 14-10, due to a number of issues the results of Eastern Baltic Cod analytical assessment are particularly uncertain. Therefore, as an interim measure, ICES has adopted the data limited approach to providing advice for 2015. Furthermore, the Expert Group considers that basing an assessment on the SHI alone is not appropriate and may give misleading results (see section 2.4.1.5 / Annex IV section on indicator 'Purpose and Principles').

The economic data provided by MS indicates that profitability in the fleet segment is currently low despite having showed profits in the recent past. STEC EWG 14-12 has no basis to estimate the potential future economic performance of the VL 24-40 m netters segment.

Taking into consideration the existing limitations, STECF EWG 14-12 considers that it is not appropriate at this time to evaluate the measures proposed in the Latvian Action Plan.

4.1.6 Spain (ESP)

An Action Plan was presented by Spain that included detailed information about, and analysis of, biological, economic, technical and social indicators. The conclusions drawn highlighted a number of fleet sectors across several fishing zones that require specific measures. These were consistent with the data and the Fleet Report; however no proper decommissioning program was proposed in the Action Plan to bring the identified fleet segments into balance. A number of management tools currently in place were listed only in the Fleet Report, but information was lacking on targets and timeframes. The final paragraph of the translated Action Plan made available to STECF EWG 14-21 states that the Member State is awaiting 2013 biological data prior to preparing relevant Action Plans. As such Spain proposes compiling a comprehensive Action Plan later in the year for implementation in 2015. According to the document, this will be sent to the Commission as soon as it is ready, by December 2014.

Given that no Action plan has yet been proposed, STECF EWG 14-21 has no further comment.

4.2 Discussion and Conclusion on Evaluation of Member State Action Plans

STECF EWG 14-12 discussed the operational approach to be applied in order to evaluate the Action Plans. As a first step the consistency between the contents of the fleet report and the Action Plan of each MS needs to be checked. The rationale behind the choice of certain target and tools should be clearly outlined in an Action Plan, and a clear explanation why the proposed measure(s) is (are) the most appropriate tool(s) to achieve the target(s) should be provided. The timeframe of the Action Plan implementation should be clearly stated and linked to the adjustment targets, and a justification why a certain timeframe has been chosen should be given. EWG 14-12 suggests that an overview of the progress achieved in implementing Member States' Action Plans should be documented future annual fleet reports.

STECF EWGs 14-12 / 14-21 considers that in the case of considerable uncertainty in the evaluation of stock status which has led to stock assessments being rejected by the appropriate scientific bodies such as STECF, ICES and GFCM, the biological indicators will also be uncertain and consideration needs to be given as to whether it is appropriate to use them in identifying those fleet segments that require an Action Plan.

STECF EWGs 14-12 / 14-21 also considers that when a multi-annual management plan is already in place at EU level, coherence and consistency of management measures under the Action Plan with existing measures under the multi-annual management plan should be ensured.

STECF EWG 14-21 discussed the issues with and discrepancies between Member States' Action Plans, taking also into consideration the Action Plans revised during STECF EWG 14-12. Clear guidance on the specific requirements of Action Plans and the criteria by which they are assessed is likely to lead to improved quality and consistency amongst Member States Action Plans. The Expert group suggests that additional guidelines for the preparation of action plans should be incorporated into future guidelines to Member States for the preparation of their annual reports. Such guidelines should strongly emphasise the following five components required and subsequently used to assess Member States' Action Plans:

(i) Consistency with analysis of balance indicators, including the three types of indicators and excluding extraordinary circumstances that might temporarily affect the perception of overcapacity (e.g. exceptional change in market prices);

(ii) Discussion of the cause of imbalance: existence of different fisheries, possibility to exploit different stocks, external economic situation or data issues;

(iii) Examination of adjustment targets, based, for example, on historical attainment of previous targets and a description of circumstances that might affect future attainment;

(iv) Specification of tools including which fleet segments and fisheries will be targeted. Reasons for matching the tool to the fleet segment will also improve the probability of success, as for example previous/ expected effectiveness of the tool, available resources for the implementation, agreement with stakeholders;

(v) Specification of a clear timeframe, preferably including fixed dates, intermediate steps and a realistic period for implementation (based e.g. on past experiences with capacity reduction).

STECF EWGs 14-12 / 14-21 evaluated 6 Action Plans, specifically from Cyprus, Croatia, France, Italy, Latvia and Spain. There were issues with all the Action Plans which were reviewed, which will need to be addressed by the relevant MS authorities before the plans can be considered acceptable. All six MS should provide clearer reasoning regarding their choice of the capacity management measures proposed in their action plans.

5 CONTACT DETAILS OF STECF MEMBERS AND EWG-14-12/14-21 PARTICIPANT LISTS

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

For more information: http://stecf.jrc.ec.europa.eu/adm-declarations

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6 LIST OF BACKGROUND DOCUMENTS

Background documents are published on the meeting's web site on:
http://stecf.jrc.ec.europa.eu/ewg1412

List of background documents:

1. EWG-14-12 – Doc 1 - Declarations of invited and JRC experts (see also section 5 of this report – List of participants)
2. COM(2014) 545 final – Doc 2 - Guidelines for the analysis of the balance between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy.

The following STECF reports used as background documents can be found on:
http://stecf.jrc.ec.europa.eu/reports/balance

1. 2014-06_STECF 14-09 - Balance indicators_JRC90403.pdf
2. 2014-06_STECF 14-09 - Balance indicators_all tables_JRC90403.zip
3. 2013-11_STECF 13-28 - Balance capacity_JRC86350.pdf
4. 2013-04_STECF 13-08 - Balance indicators_JRC81659.pdf
5. 2012-11_STECF 12-18 Balance capacity_ JRC76704.pdf
6. 2011-11_STECF11-17- Balance capacity and fishing opportunities_JRC67795.pdf
7. 10-09_SG-BRE 10-01 - Fleet capacity and fishing opportunities _JRC61983.pdf

7 ANNEX I – STOCK REFERENCE LIST

The reference list shown below is currently used to divide commercial landings data at species level into stocks. The resulting stock landings data (by value or weight) was used by the *ad hoc* contractors in the calculation of the Sustainable Harvest Indicator (SHI) and the Stocks at Risk Indicator (SAR) for consideration by STECF EWG 14-12/ 14-21.

fishstock	species_code	sub_division_fao	nb_stock	fishstock	species_code	sub_division_fao	nb_stock
alb-27	ALB	27.4.A	1	hom-west	HOM	27.7.H	1
alb-27	ALB	27.7.G	1	hom-west	HOM	27.5.B	1
alb-27	ALB	27.7.H	1	hom-west	HOM	27.8.C	2
alb-27	ALB	27.7	1	hom-west	HOM	27.7.E	1
alb-27	ALB	27.6.B	1	hom-west	HOM	27.8.D	1
alb-27	ALB	27.8.B	1	hom-west	HOM	27.8.B	1
alb-27	ALB	27.6.A	1	hom-west	HOM	27.5.B.2	1
alb-27	ALB	27.8.E	1	hom-west	HOM	27.4.A	1
alb-27	ALB	27.9.B	1	hom-west	HOM	27.7.C	1
alb-27	ALB	27.7.K	1	hom-west	HOM	27.7.F	1
alb-27	ALB	27.1	1	hom-west	HOM	27.7.G	1
alb-27	ALB	27.7.E	1	hom-west	HOM	27.7.J	1
alb-27	ALB	27.7.D	1	hom-west	HOM	27.6.A	1
alb-27	ALB	27.7.C	1	jrs-gsa09	JRS	37.1.3	1
alb-27	ALB	27.10.A	1	lib-gsa26	LIB	37.3.2	1
alb-27	ALB	27.10.B	1	lin-comb	LIN	27.8.A	1
alb-27	ALB	27.8.A	1	lin-comb	LIN	27.7.C	1
alb-27	ALB	27.7.J	1	lin-comb	LIN	27.4.B	1
alb-27	ALB	27.8.D	1	lin-comb	LIN	27.7.B	1
alb-27	ALB	27.9	1	lin-comb	LIN	27.8.B	1
alb-27	ALB	27.9.A	1	lin-comb	LIN	27.12.A	1
alb-27	ALB	27.7.A	1	lin-comb	LIN	27.2.A	1
alb-27	ALB	27.12.A	1	lin-comb	LIN	27.8.E	1
alb-27	ALB	27.12	1	lin-comb	LIN	27.3.A	1
alb-27	ALB	27.8.C	1	lin-comb	LIN	27.3.B.23	1
alb-27	ALB	27.7.F	1	lin-comb	LIN	27.14.B	1
anb-78ab	MON	27.7.C	2	lin-comb	LIN	37.1.2	1
anb-78ab	MON	27.7.H	2	lin-comb	LIN	27.7.H	1
anb-78ab	MNZ	27.7.B	2	lin-comb	LIN	34	1
anb-78ab	MON	27.7.G	2	lin-comb	LIN	27.3.D.25	1
anb-78ab	MNZ	27.7.C	2	lin-comb	LIN	27.8.C	1
anb-78ab	MNZ	27.8.A	2	lin-comb	LIN	34.1.1	1
anb-78ab	ANF	27.7.D	2	lin-comb	LIN	27.7.K	1
anb-78ab	ANF	27.7.G	2	lin-comb	LIN	27.6.B	2
anb-78ab	ANF	27.7.J	2	lin-comb	LIN	27.9.A	1
anb-78ab	ANF	27.8.A	2	lin-comb	LIN	27.8.D	1
anb-78ab	MNZ	27.7.K	2	lin-comb	LIN	27.1	1

anb-78ab	MON	27.8.A	2	lin-comb	LIN	27.3.C.22	1
anb-78ab	MON	27.7.J	2	lin-comb	LIN	27.4.A	1
anb-78ab	ANF	27.7.H	2	lin-comb	LIN	27.7.J	1
anb-78ab	MON	27.7.K	2	lin-comb	LIN	27.7.G	1
anb-78ab	MON	27.7.F	2	lin-comb	LIN	27	1
anb-78ab	ANF	27.7.B	2	lin-comb	LIN	27.7.D	1
anb-78ab	MNZ	27.7.F	2	lin-comb	LIN	27.3.D.24	1
anb-78ab	MON	27.7.B	2	lin-comb	LIN	27.2.B	1
anb-78ab	MON	27.7.E	2	lin-comb	LIN	27.5.B	2
anb-78ab	ANF	27.7.C	2	lin-comb	LIN	27.6.A	1
anb-78ab	MNZ	27.7.H	2	lin-comb	LIN	0	1
anb-78ab	ANF	27.8.B	2	lin-comb	LIN	47.1.1	1
anb-78ab	ANF	27.7.F	2	lin-comb	LIN	27.7.A	1
anb-78ab	MNZ	27.7.E	2	lin-comb	LIN	27.7.E	1
anb-78ab	MNZ	27.7.G	2	lin-comb	LIN	27.7.F	1
anb-78ab	ANF	27.7.E	2	lin-comb	LIN	27.4.C	1
anb-78ab	MNZ	27.8.B	2	lin-faro	LIN	27.5.B	2
anb-78ab	MNZ	27.7.D	2	lin-rock	LIN	27.6.B	2
anb-78ab	MON	27.7.D	2	mac-nea	MAC	27.7.J	1
anb-78ab	ANF	27.7.K	2	mac-nea	MAC	27.7.D	1
anb-78ab	MNZ	27.7.J	2	mac-nea	MAC	27.7.H	1
anb-78ab	MON	27.8.B	2	mac-nea	MAC	27.6.A	1
anb-8c9a	ANF	27.8.C	2	mac-nea	MAC	27.4	1
anb-8c9a	MNZ	27.9.A	2	mac-nea	MAC	27.4.B	1
anb-8c9a	MON	27.8.C	1	mac-nea	MAC	27.7.C	1
anb-8c9a	MNZ	27.8.C	2	mac-nea	MAC	27.8.A	1
anb-8c9a	MON	27.9.A	1	mac-nea	MAC	27.4.A	1
anb-8c9a	ANF	27.9.A	2	mac-nea	MAC	27.3.A	1
anb-gsa05	ANF	37.1.1	2	mac-nea	MAC	27.8.B	1
anb-gsa05	MON	37.1.1	2	mac-nea	MAC	27.6.B	1
anb-gsa05	MNZ	37.1.1	2	mac-nea	MAC	27.7.G	1
anb-gsa06	MON	37.1.1	2	mac-nea	MAC	27.9.A	1
anb-gsa06	ANF	37.1.1	2	mac-nea	MAC	27.4.C	1
anb-gsa06	MNZ	37.1.1	2	mac-nea	MAC	27.7.E	1
anb-gsa07	ANF	37.1.2	1	mac-nea	MAC	27.7.K	1
anb-gsa07	MON	37.1.2	1	mac-nea	MAC	27.8.C	1
anb-gsa07	MNZ	37.1.2	1	mac-nea	MAC	27.7.B	1
anb-gsa15_16	ANF	37.2.2.15	1	mac-nea	MAC	27.6	1
anb-gsa15_16	ANF	37.2.2	1	mac-nea	MAC	27.7.A	1
anb-gsa15_16	MNZ	37.2.2.15	1	mac-nea	MAC	27.7.F	1
anb-gsa15_16	MON	37.2.2	1	mgb-8c9a	MEG	27.9.A	2
anb-gsa15_16	MON	37.2.2.15	1	mgb-8c9a	LEZ	27.9.A	2
anb-gsa15_16	MNZ	37.2.2	1	mgb-8c9a	MEG	27.8.C	2
ane-bisc	ANE	27.8.C	1	mgb-8c9a	LEZ	27.8.C	2
ane-bisc	ANE	27.8.A	1	mgw-78	MEG	27.8.B	1
ane-bisc	ANE	27.8.B	1	mgw-78	LEZ	27.7.C	1

ane-bisc	ANE	27.8	1	mgw-78	MEG	27.7.C	1
ane-gsa01	ANE	37.1.1	2	mgw-78	LEZ	27.7.H	1
ane-gsa06	ANE	37.1.1	2	mgw-78	LEZ	27.8.B	1
ane-gsa09	ANE	37.1.3	1	mgw-78	LEZ	27.7.D	1
ane-gsa16	ANE	37.2.2	1	mgw-78	LEZ	27.7.B	1
ane-gsa17	ANE	37.2.1	2	mgw-78	LEZ	27.7.A	1
ane-gsa17_18	ANE	37.2.1	2	mgw-78	MEG	27.7.D	1
ane-gsa29	ANE	37.4.2	1	mgw-78	LEZ	27.8.D	1
ang-ivvi	ANG	27.4.B	1	mgw-78	MEG	27.7.A	1
ang-ivvi	ANG	27.4.A	1	mgw-78	MEG	27.7.F	1
ang-ivvi	ANG	27.6.B	1	mgw-78	MEG	27.7.H	1
ang-ivvi	ANG	27.6.A	1	mgw-78	MEG	27.7.E	1
anp-78ab	ANF	27.7.E	2	mgw-78	LEZ	27.7.K	1
anp-78ab	MON	27.8.A	2	mgw-78	MEG	27.7	1
anp-78ab	ANF	27.7.H	2	mgw-78	MEG	27.8.A	1
anp-78ab	MNZ	27.7.F	2	mgw-78	MEG	27.7.J	1
anp-78ab	MNZ	27.7.E	2	mgw-78	MEG	27.7.G	1
anp-78ab	ANF	27.8.B	2	mgw-78	MEG	27.7.K	1
anp-78ab	MON	27.7.G	2	mgw-78	LEZ	27.8.E	1
anp-78ab	ANF	27.7.D	2	mgw-78	LEZ	27.7.E	1
anp-78ab	MNZ	27.7.K	2	mgw-78	LEZ	27.7.F	1
anp-78ab	MON	27.7.J	2	mgw-78	LEZ	27.7	1
anp-78ab	MON	27.7.K	2	mgw-78	LEZ	27.7.J	1
anp-78ab	ANF	27.7.B	2	mgw-78	MEG	27.8.E	1
anp-78ab	MON	27.7.B	2	mgw-78	LEZ	27.7.G	1
anp-78ab	MNZ	27.7.H	2	mgw-78	MEG	27.8.D	1
anp-78ab	MON	27.7.C	2	mgw-78	MEG	27.7.B	1
anp-78ab	ANF	27.7.F	2	mgw-78	LEZ	27.8.A	1
anp-78ab	MON	27.7.F	2	mgw-8c9a	LEZ	27.8.C	2
anp-78ab	MNZ	27.8.B	2	mgw-8c9a	LEZ	27.9.A	2
anp-78ab	MNZ	27.7.D	2	mgw-8c9a	MEG	27.9.A	2
anp-78ab	ANF	27.7.K	2	mgw-8c9a	MEG	27.8.C	2
anp-78ab	MON	27.7.D	2	mts-gsa09	MTS	37.1.3	2
anp-78ab	MON	27.8.B	2	mts-gsa10	MTS	37.1.3	2
anp-78ab	MON	27.7.H	2	mts-gsa17	MTS	37.2.1	2
anp-78ab	MNZ	27.7.B	2	mts-gsa18	MTS	37.2.1	2
anp-78ab	MNZ	27.7.C	2	mulbar-gsa01	MUT	37.1.1	5
anp-78ab	ANF	27.7.G	2	mulbar-gsa01	MUX	37.1.1	5
anp-78ab	ANF	27.7.J	2	mulbar-gsa03	MUX	37.1.1	5
anp-78ab	ANF	27.8.A	2	mulbar-gsa03	MUT	37.1.1	5
anp-78ab	MNZ	27.8.A	2	mulbar-gsa05	MUX	37.1.1	5
anp-78ab	MNZ	27.7.J	2	mulbar-gsa05	MUT	37.1.1	5
anp-78ab	ANF	27.7.C	2	mulbar-gsa06	MUX	37.1.1	5
anp-78ab	MNZ	27.7.G	2	mulbar-gsa06	MUT	37.1.1	5
anp-78ab	MON	27.7.E	2	mulbar-gsa07	MUX	37.1.2	1
anp-8c9a	ANF	27.8.C	2	mulbar-gsa07	MUT	37.1.2	1

anp-8c9a	MNZ	27.8.C	2	mulbar-gsa09	MUT	37.1.3	3
anp-8c9a	MNZ	27.9.A	2	mulbar-gsa09	MUX	37.1.3	3
anp-8c9a	ANF	27.9.A	2	mulbar-gsa10	MUT	37.1.3	3
ara-gsa01	ARA	37.1.1	3	mulbar-gsa10	MUX	37.1.3	3
ara-gsa05	ARA	37.1.1	3	mulbar-gsa11	MUT	37.1.1	5
ara-gsa06	ARA	37.1.1	3	mulbar-gsa11	MUX	37.1.3	3
ara-gsa09	ARA	37.1.3	2	mulbar-gsa11	MUX	37.1.1	5
ara-gsa10	ARA	37.1.3	2	mulbar-gsa11	MUT	37.1.3	3
ara-gsa15_16	ARA	37.2.2	1	mulbar-gsa15_16	MUT	37.2.2	2
ara-gsa15_16	ARA	37.2.2.15	1	mulbar-gsa15_16	MUT	37.2.2.15	1
ars-gsa09	ARS	37.1.3	4	mulbar-gsa15_16	MUX	37.2.2	2
ars-gsa10	ARS	37.1.3	4	mulbar-gsa15_16	MUX	37.2.2.15	1
ars-gsa11	ARS	37.1.3	4	mulbar-gsa17	MUT	37.2.1	2
ars-gsa12_16	ARS	37.2.2	2	mulbar-gsa17	MUX	37.2.1	2
ars-gsa12_16	ARS	37.1.3	4	mulbar-gsa18	MUT	37.2.1	2
ars-gsa15_16	ARS	37.2.2.15	1	mulbar-gsa18	MUX	37.2.1	2
ars-gsa15_16	ARS	37.2.2	2	mulbar-gsa19	MUX	37.2.2	2
ars-gsa18	ARS	37.2.1	1	mulbar-gsa19	MUT	37.2.2	2
bft	BFT	27.8.E	1	mulbar-gsa25	MUT	37.3.2	1
bft	BFT	27.10.A	1	mulbar-gsa25	MUX	37.3.2	1
bft	BFT	27.9.A	1	mulbar-gsa29	MUX	37.4.2	1
bft	BFT	27.7.D	1	mulbar-gsa29	MUT	37.4.2	1
bft	BFT	37.2.1	1	mulsur-gsa05	MUR	37.7.1	1
bft	BFT	37.2.2	1	mulsur-gsa09	MUR	37.1.3	1
bft	BFT	37.1.2	1	mulsur-gsa25	MUR	37.3.2	2
bft	BFT	27.8.A	1	mulsur-gsa26	MUR	37.3.2	2
bft	BFT	27.8.D	1	nep-10-noup	NEP	27.4.A	5
bft	BFT	27.7.J	1	nep-11	NEP	27.6.A	1
bft	BFT	27.7.K	1	nep-12	NEP	37.1.3	2
bft	BFT	37.1.3	1	nep-14	NEP	27.7.A	2
bft	BFT	37.3.2	1	nep-15	NEP	27.7.A	2
bft	BFT	27.7.E	1	nep-17	NEP	27.7.B	1
bft	BFT	27.10.B	1	nep-2022	NEP	27.7.G	1
bft	BFT	27.7.F	1	nep-2022	NEP	27.7.F	1
bft	BFT	27.9.B	1	nep-32-nor	NEP	27.4.A	5
bft	BFT	27.7.H	1	nep-33-horn	NEP	27.4.A	5
bft	BFT	27.8.C	1	nep-3-skag	NEP	27.3.A	2
bft	BFT	37.1.1	1	nep-4-kat	NEP	27.3.A	2
bft	BFT	27.8.B	1	nep-5-botney	NEP	27.4.B	3
bli-comb	BLI	27.7.C	1	nep-5-botney	NEP	27.4.C	3
bli-comb	BLI	27.5.B	2	nep-6-farn	NEP	27.4.C	3
bli-comb	BLI	27.7.K	1	nep-6-farn	NEP	27.4.B	3
bli-comb	BLI	27.7.J	1	nep-7-fladen	NEP	27.4.A	5
bli-comb	BLI	27.7.G	1	nep-8ab	NEP	27.8.B	1
bli-comb	BLI	27.7.B	1	nep-8ab	NEP	27.8.A	1
bli-comb	BLI	27.7.H	1	nep-8-forth	NEP	27.4.C	3

bli-comb	BLI	27.6.B	2	nep-8-forth	NEP	27.4.B	3
bli-comb	BLI	27.7.D	1	nep-9-moray	NEP	27.4.A	5
bli-comb	BLI	27.6.A	1	nep-gsa05	NEP	37.1.1	2
bli-comb	BLI	27.7.E	1	nep-gsa06	NEP	37.1.1	2
bli-comb	BLI	27.7.F	1	nep-gsa09	NEP	37.1.3	2
bli-faro	BLI	27.5.B	2	nep-gsa15_16	NEP	37.2.2.15	1
bli-rock	BLI	27.6.B	2	nep-gsa15_16	NEP	37.2.2	2
boc-nea	BOC	27.4.A	1	nep-gsa18	NEP	37.2.2	2
boc-nea	BOC	27.7.D	1	nop-34	NOP	27.4.B	2
boc-nea	BOC	27.6.A	1	nop-34	NOP	27.4	2
boc-nea	BOR	27.8.A	1	nop-34	NOP	27.4.A	2
boc-nea	BOC	27.8.D	1	nop-34	NOP	27.4.C	1
boc-nea	BOC	27.7.J	1	nop-34	NOP	27.3.A	2
boc-nea	BOC	34.1.2	1	nop-nsea	NOP	27.4.B	2
boc-nea	BOR	27.8.D	1	nop-nsea	NOP	27.3.A	2
boc-nea	BOR	27.4.B	1	nop-nsea	NOP	27.4.A	2
boc-nea	BOR	34.1.2	1	nop-nsea	NOP	27.4	2
boc-nea	BOC	27.7.G	1	occ-gsa05	OCC	37.1.1	1
boc-nea	BOC	27.4.C	1	occ-gsa05	OCT	37.1.1	1
boc-nea	BOC	27.9.A	1	pac-gsa09	PAC	37.1.3	1
boc-nea	BOC	27.7.B	1	pac-gsa15_16	PAC	37.2.2	1
boc-nea	BOR	27.7.B	1	pac-gsa15_16	PAC	37.2.2.15	1
boc-nea	BOR	27.7.C	1	pac-gsa26	PAC	37.3.2	1
boc-nea	BOR	27.7.E	1	pco-gsa09	CAP	37.1.3	1
boc-nea	BOR	27.7.G	1	pil-gsa01	PIL	37.1.1	2
boc-nea	BOR	27.4.A	1	pil-gsa06	PIL	37.1.1	2
boc-nea	BOR	27.6.A	1	pil-gsa16	PIL	37.2.2	1
boc-nea	BOR	27.7.J	1	pil-gsa17	PIL	37.2.1	2
boc-nea	BOR	27.7.H	1	pil-gsa17_18	PIL	37.2.1	2
boc-nea	BOR	27.4.C	1	ple-2232	PLE	27.3.B.23	1
boc-nea	BOC	27.8.A	1	ple-2232	PLE	27.3.D.30	1
boc-nea	BOC	27.7.E	1	ple-2232	PLE	27.3.D.24	1
boc-nea	BOR	27.9.A	1	ple-2232	PLE	27.3.D.26	1
boc-nea	BOC	27.7.C	1	ple-2232	PLE	27.3.D.29	1
boc-nea	BOR	27.7.D	1	ple-2232	PLE	27.3.D.28	1
boc-nea	BOC	27.7.H	1	ple-2232	PLE	27.3.D.31	1
boc-nea	BOC	27.4.B	1	ple-2232	PLE	27.3.C.22	1
bog-gsa03	BOG	37.1.1	1	ple-2232	PLE	27.3.D.27	1
bog-gsa25	BOG	37.3.2	2	ple-2232	PLE	27.3.D.32	1
bog-gsa26	BOG	37.3.2	2	ple-7h-k	PLE	27.7.K	1
bum-27	BUM	27.10.B	1	ple-7h-k	PLE	27.7.H	1
bum-27	BUM	27.8.A	1	ple-7h-k	PLE	27.7.J	1
bum-27	BUM	27.8.C	1	ple-celt	PLE	27.7.F	1
bum-27	BUM	37.1.2	1	ple-celt	PLE	27.7.G	1
bum-27	BUM	27.10.A	1	ple-eche	PLE	27.7.D	1
bum-27	BUM	27.9.B	1	ple-echw	PLE	27.7.E	1

bum-27	BUM	27.9.A	1	ple-iris	PLE	27.7.A	1
bum-27	BUM	27	1	ple-kask	PLE	27.3.A	1
bum-27	BUM	27.9	1	ple-nsea	PLE	27.4	1
cap-bars	CAP	27.1	1	ple-nsea	PLE	27.4.C	1
cap-bars	CAP	27.2.B	1	ple-nsea	PLE	27.4.A	1
cod-2224	COD	27.3.B.23	1	ple-nsea	PLE	27.4.B	1
cod-2224	COD	27.3.D.24	1	rbc-gsa14	GUZ	37.2.2	1
cod-2224	COD	27.3.C.22	1	rjc-gsa09	RJC	37.1.3	1
cod-2532	COD	27.3.D.27	1	sai-3a46	POK	27.3.A	1
cod-2532	COD	27.3.D.29	1	sai-3a46	POK	27.6.B	1
cod-2532	COD	27.3.D.26	1	sai-3a46	POK	27.4.C	1
cod-2532	COD	27.3.D.28	1	sai-3a46	POK	27.4.A	1
cod-2532	COD	27.3.D.32	1	sai-3a46	POK	27.6.A	1
cod-2532	COD	27.3.D.25	1	sai-3a46	POK	27.4.B	1
cod-2532	COD	27.3.D.31	1	sai-3a46	POK	27.4	1
cod-2532	COD	27.3.D.30	1	sai-3a46	POK	27.6	1
cod-347d	COD	27.4	1	sai-faro	SAI	27.5.B	1
cod-347d	COD	27.4.A	1	sai-icel	SAI	27.5.A	1
cod-347d	COD	27.7.D	1	san-ns1	SAN	27.4.C	1
cod-347d	COD	27.4.C	1	san-ns2	SAN	27.3.A	1
cod-347d	COD	27.3.A	2	san-ns3	SAN	27.4.B	3
cod-347d	COD	27.4.B	1	san-nsea	SAN	27.4.A	2
cod-7e-k	COD	27.7.K	1	san-nsea	SAN	27.4.B	3
cod-7e-k	COD	27.7.E	1	san-nsea	SAN	27.4	2
cod-7e-k	COD	27.7.J	1	san-nsea-alt	SAN	27.4.B	3
cod-7e-k	COD	27.7.F	1	san-nsea-alt	SAN	27.4.A	2
cod-7e-k	COD	27.7.G	1	san-nsea-alt	SAN	27.4	2
cod-7e-k	COD	27.7.H	1	sar-soth	PIL	27.8.C	1
cod-arct	COD	27.2.B	2	sar-soth	PIL	27.9.A	1
cod-arct	COD	27.1	1	sbr-gsa1_3	SBR	37.1.1	1
cod-arct	COD	27.2	1	sho-gsa09	SHO	37.1.3	1
cod-arct	COD	27.1.A	1	sol-7h-k	SOL	27.7.J	1
cod-arct	COD	27.1.B	1	sol-7h-k	SOL	27.7.K	1
cod-arct	COD	27.2.A	1	sol-7h-k	SOL	27.7.H	1
cod-arct	COD	27	1	sol-bisc	SOL	27.8.B	1
cod-farb	COD	27.2.B	2	sol-bisc	SOL	27.8.A	1
cod-farp	COD	27.5.B	1	sol-celt	SOL	27.7.F	1
cod-iceg	COD	27.5.A	1	sol-celt	SOL	27.7.G	1
cod-iris	COD	27.7.A	1	sol-eche	SOL	27.7.D	1
cod-kat	COD	27.3.A	2	sol-echw	SOL	27.7.E	1
cod-scow	COD	27.6.A	1	sol-gsa17	SOL	37.2.1	1
dab-2232	DAB	27.3.D.30	1	sol-gsa26	SOL	37.3.2	1
dab-2232	DAB	27.3.C.22	1	sol-iris	SOL	27.7.A	1
dab-2232	DAB	27.3.D.31	1	sol-kask	SOL	27.3.A	1
dab-2232	DAB	27.3.D.28	1	sol-nsea	SOL	27.4.A	1
dab-2232	DAB	27.3.B.23	1	sol-nsea	SOL	27.4.B	1

dab-2232	DAB	27.3.D.27	1	sol-nsea	SOL	27.4.C	1
dab-2232	DAB	27.3.D.29	1	sol-nsea	SOL	27.4	1
dab-2232	DAB	27.3.D.24	1	spc-gsa25	SPC	37.3.2	1
dab-2232	DAB	27.3.D.25	1	spr-2232	SPR	27.3.C.22	1
dab-2232	DAB	27.3.D.26	1	spr-2232	SPR	27.3.D.27	1
dab-2232	DAB	27.3.D.32	1	spr-2232	SPR	27.3.D.28	1
dgs-gsa29	DGS	37.4.2	1	spr-2232	SPR	27.3.D.29	1
dps-gsa01	DPS	37.1.1	5	spr-2232	SPR	27.3.D.24	1
dps-gsa03	DPS	37.1.1	5	spr-2232	SPR	27.3.D.26	1
dps-gsa04	DPS	37.1.1	5	spr-2232	SPR	27.3.D.30	1
dps-gsa05	DPS	37.1.1	5	spr-2232	SPR	27.3.D.32	1
dps-gsa06	DPS	37.1.1	5	spr-2232	SPR	27.3.D.31	1
dps-gsa09	DPS	37.1.3	3	spr-2232	SPR	27.3.B.23	1
dps-gsa10	DPS	37.1.3	3	spr-ech	SPR	27.7.D	1
dps-gsa12_16	DPS	37.1.3	3	spr-ech	SPR	27.7.E	1
dps-gsa12_16	DPS	37.2.2	3	spr-gsa24	SPR	37.3.2	1
dps-gsa18	DPS	37.2.2	3	spr-gsa29	SPR	37.4.2	1
dps-gsa19	DPS	37.2.2	3	spr-kask	SPR	27.3.A	1
fle-2425	FLE	27.3.D.25	1	spr-nsea	SPR	27.4.A	1
fle-2425	FLE	27.3.D.24	1	spr-nsea	SPR	27.4	1
gfb-gsa09	GFB	37.1.3	1	spr-nsea	SPR	27.4.B	1
ghl-arct	GHL	27.1	1	syc-gsa04	SYC	37.1.1	1
ghl-arct	GHL	27	1	syc-gsa09	SYC	37.1.3	1
ghl-arct	GHL	27.2	1	tur-2232	TUR	27.3.D.28	1
ghl-arct	GHL	27.1.A	1	tur-2232	TUR	27.3.D.31	1
ghl-arct	GHL	27.2.B	1	tur-2232	TUR	27.3.D.30	1
ghl-arct	GHL	27.2.A	1	tur-2232	TUR	27.3.C.22	1
ghl-arct	GHL	27.1.B	1	tur-2232	TUR	27.3.D.26	1
had-34	HAD	27.4.B	1	tur-2232	TUR	27.3.D.24	1
had-34	HAD	27.4.C	1	tur-2232	TUR	27.3.D.32	1
had-34	HAD	27.4.A	1	tur-2232	TUR	27.3.B.23	1
had-34	HAD	27.4	1	tur-2232	TUR	27.3.D.27	1
had-34	HAD	27.3.A	1	tur-2232	TUR	27.3.D.29	1
had-7b-k	HAD	27.7.B	1	tur-gsa29	TUR	37.4.2	1
had-7b-k	HAD	27.7.G	1	usk-icel	USK	27.5.A	1
had-7b-k	HAD	27.7.F	1	whb-comb	WHB	27.3.D.29	1
had-7b-k	HAD	27.7.H	1	whb-comb	WHB	27.4.C	1
had-7b-k	HAD	27.7.D	1	whb-comb	WHB	27.3.D.31	1
had-7b-k	HAD	27.7.E	1	whb-comb	WHB	27.6	1
had-7b-k	HAD	27.7.J	1	whb-comb	WHB	27.5.B.1	1
had-7b-k	HAD	27.7.K	1	whb-comb	WHB	27.3.B,C	1
had-7b-k	HAD	27.7.C	1	whb-comb	WHB	27.7.B	1
had-arct	HAD	27.2.A	1	whb-comb	WHB	27.8.A	1
had-arct	HAD	27.2	1	whb-comb	WHB	27.8	1
had-arct	HAD	27.2.B	1	whb-comb	WHB	27.2	1
had-arct	HAD	27.1	1	whb-comb	WHB	27.8.D	1

had-arct	HAD	27	1	whb-comb	WHB	27.2.A	1
had-arct	HAD	27.1.A	1	whb-comb	WHB	27.4.B	1
had-faro	HAD	27.5.B	1	whb-comb	WHB	27.8.C	1
had-iceg	HAD	27.5.A	1	whb-comb	WHB	27.12.A	1
had-iris	HAD	27.7.A	1	whb-comb	WHB	27.14.A	1
had-rock	HAD	27.6.B	1	whb-comb	WHB	27.14.B	1
had-scow	HAD	27.6.A	1	whb-comb	WHB	27.7.A	1
her-2532	HER	27.3.D.29	2	whb-comb	WHB	27.4	1
her-2532	HER	27.3.D.27	2	whb-comb	WHB	27.7.G	1
her-2532	HER	27.3.D.28	3	whb-comb	WHB	27.4.A	1
her-2532	HER	27.3.D.32	2	whb-comb	WHB	27.7.J	1
her-2532	HER	27.3.D.26	2	whb-comb	WHB	27.3.A	1
her-2532	HER	27.3.D.25	2	whb-comb	WHB	27.8.B	1
her-2532-gor	HER	27.3.D.32	2	whb-comb	WHB	27.9	1
her-2532-gor	HER	27.3.D.29	2	whb-comb	WHB	27.3.D.24	1
her-2532-gor	HER	27.3.D.31	2	whb-comb	WHB	27.8.E	1
her-2532-gor	HER	27.3.D.25	2	whb-comb	WHB	27.5	1
her-2532-gor	HER	27.3.D.27	2	whb-comb	WHB	27.3.D.26	1
her-2532-gor	HER	27.3.D.26	2	whb-comb	WHB	27.3.D	1
her-2532-gor	HER	27.3.D.30	2	whb-comb	WHB	27.7.K	1
her-2532-gor	HER	27.3.D.28	3	whb-comb	WHB	27.3	1
her-30	HER	27.3.D.30	2	whb-comb	WHB	27.3.D.30	1
her-31	HER	27.3.D.31	2	whb-comb	WHB	27.3.B.23	1
her-3a22	HER	27.3.D.24	1	whb-comb	WHB	27.3.D.27	1
her-3a22	HER	27.3.A	1	whb-comb	WHB	27.12.C	1
her-3a22	HER	27.3.C.22	1	whb-comb	WHB	27.7.E	1
her-47d3	HER	27.7.D	1	whb-comb	WHB	27.7	1
her-47d3	HER	27.4.A	1	whb-comb	WHB	27.7.F	1
her-47d3	HER	27.4.B	1	whb-comb	WHB	27.2.B	1
her-47d3	HER	27.4.C	1	whb-comb	WHB	27.3.D.28	1
her-47d3	HER	27.4	1	whb-comb	WHB	27.5.A	1
her-clyd	HER	27.6.A	3	whb-comb	WHB	27.12.B	1
her-irls	HER	27.7.J	1	whb-comb	WHB	27.1.B	1
her-irlw	HER	27.7.B	1	whb-comb	WHB	27.1	1
her-irlw	HER	27.6.A	3	whb-comb	WHB	27.6.B	1
her-irlw	HER	27.7.C	1	whb-comb	WHB	27.1.A	1
her-nirs	HER	27.7.A	1	whb-comb	WHB	27.7.C	1
her-riga	HER	27.3.D.28	3	whb-comb	WHB	27.9.A	1
her-vasu	HER	27.5.A	1	whb-comb	WHB	27.12	1
her-vian	HER	27.6.A	3	whb-comb	WHB	27.6.A	1
hke-gsa01	HKE	37.1.1	4	whb-comb	WHB	27.7.H	1
hke-gsa03	HKE	37.1.1	4	whb-comb	WHB	27.9.B	1
hke-gsa05	HKE	37.1.1	4	whb-comb	WHB	27.3.D.25	1
hke-gsa06	HKE	37.1.1	4	whb-comb	WHB	27.3.D.32	1
hke-gsa07	HKE	37.1.2	1	whb-comb	WHB	27.5.B.2	1
hke-gsa09	HKE	37.1.3	4	whb-comb	WHB	27.14	1

hke-gsa10	HKE	37.1.3	4	whb-comb	WHB	27.7.D	1
hke-gsa11	HKE	37.1.3	4	whb-comb	WHB	27.3.C.22	1
hke-gsa12_16	HKE	37.2.2	4	whb-comb	WHB	27.5.B	1
hke-gsa12_16	HKE	37.1.3	4	whb-gsa01	WHB	37.1.1	2
hke-gsa15	HKE	37.2.2	4	whb-gsa06	WHB	37.1.1	2
hke-gsa15	HKE	37.2.2.15	2	whb-gsa09	WHB	37.1.3	1
hke-gsa15_16	HKE	37.2.2.15	2	whg-47d	WHG	27.7.D	1
hke-gsa15_16	HKE	37.2.2	4	whg-47d	WHG	27.4	1
hke-gsa17	HKE	37.2.1	2	whg-47d	WHG	27.4.A	1
hke-gsa18	HKE	37.2.1	2	whg-47d	WHG	27.4.C	1
hke-gsa19	HKE	37.2.2	4	whg-47d	WHG	27.4.B	1
hke-gsa26	HKE	37.3.2	1	whg-7e-k	WHG	27.7.E	1
hke-nrtn	HKE	27.7.E	1	whg-7e-k	WHG	27.7.F	1
hke-nrtn	HKE	27.3.A	1	whg-7e-k	WHG	27.7.G	1
hke-nrtn	HKE	27.6.A	1	whg-7e-k	WHG	27.7.J	1
hke-nrtn	HKE	27.7.C	1	whg-7e-k	WHG	27.7.K	1
hke-nrtn	HKE	27.4.A	1	whg-7e-k	WHG	27.7.H	1
hke-nrtn	HKE	27.7.D	1	whg-gsa29	WHG	37.4.2	1
hke-nrtn	HKE	27.7	1	whg-iris	WHG	27.7.A	1
hke-nrtn	HKE	27.7.G	1	whg-kask	WHG	27.3.A	1
hke-nrtn	HKE	27.7.J	1	whg-scow	WHG	27.6.A	1
hke-nrtn	HKE	27.7.A	1	whm-27	WHM	27.9.B	1
hke-nrtn	HKE	27.4.C	1	whm-27	WHM	27.7.G	1
hke-nrtn	HKE	27.7.F	1	whm-27	WHM	27.8.D	1
hke-nrtn	HKE	27.8.A	1	whm-27	WHM	27.8.A	1
hke-nrtn	HKE	27.7.K	1	whm-27	WHM	27.10.A	1
hke-nrtn	HKE	27.4.B	1	whm-27	WHM	27.8.B	1
hke-nrtn	HKE	27.7.B	1	whm-27	WHM	27.9.A	1
hke-nrtn	HKE	27.6.B	1	whm-27	WHM	27.7.J	1
hke-nrtn	HKE	27.4	1	whm-27	WHM	27.10.B	1
hke-nrtn	HKE	27.6	1	whm-27	WHM	37.1.1	1
hke-nrtn	HKE	27.8.B	1	yft-27	YFT	27.1	1
hke-nrtn	HKE	27.7.H	1	yft-27	YFT	27.9	1
hke-soth	HKE	27.8.C	1	yft-27	YFT	27.7.B	1
hke-soth	HKE	27.9.A	1	yft-27	YFT	37.1.2	1
hmm-gsa29	HMM	37.4.2	1	yft-27	YFT	27.10.A	1
hom-soth	HOM	27.8.C	2	yft-27	YFT	27.10.B	1
hom-soth	HOM	27.9.A	1	yft-27	YFT	27.8.D	1
hom-west	HOM	27.8.E	1	yft-27	YFT	27.7.K	1
hom-west	HOM	27.5.B.1	1	yft-27	YFT	27.7.J	1
hom-west	HOM	27.7.K	1	yft-27	YFT	27.9.B	1
hom-west	HOM	27.7.B	1	yft-27	YFT	27.8.C	1
hom-west	HOM	27.7.A	1	yft-27	YFT	27.8.E	1
hom-west	HOM	27.8.A	1	yft-27	YFT	27.8.B	1
hom-west	HOM	27.2.A	1	yft-27	YFT	27.9.A	1
hom-west	HOM	27.3.A	1	yft-27	YFT	37.1.3	1

8 ANNEX II – PRIORITY LIST OF REQUIRED STOCK ASSESSMENTS

A list of fleet segments which together generated 80% of total landings values in FAO major fishing areas 27 (Northeast Atlantic) and 37 (Mediterranean and Black Sea) in 2012 is presented below. The thirty most important stocks (based on catch values) targeted by these fleet segments for which no stock assessments are available are illustrated in Figures 8.1 and 8.2 below. Carrying out assessments for these stocks should be a priority in order to improve the coverage of the SHI and SAR indicators.

Area 27 – Northeastern Part of the Atlantic Ocean

70 fleet segments (23%) produce 80% of the landing values

supra_reg	fleet_code	values
AREA27	GBR-PS-VL40XX	251027015.3
AREA27	ESP-DTS-VL2440	179362105.6
AREA27	FRA-DTS-VL1824	143166474.5
AREA27	GBR-DTS-VL2440	130058302.3
AREA27	DNK-TM-VL40XX	125232447.8
AREA27	NLD-TBB-VL40XX	115544666
AREA27	PRT-DTS-VL40XX	108887456
AREA27	NLD-TM-VL40XX	107869227
AREA27	GBR-DTS-VL1824	104778088.3
AREA27	ESP-HOK-VL2440	101037989.7
AREA27	FRA-DTS-VL2440	94806669.47
AREA27	ESP-DTS-VL40XX	92741468.41
AREA27	IRL-TM-VL40XX	91635056.42
AREA27	FRA-DTS-VL1218	79946826.13
AREA27	GBR-FPO-VL0010	67270927.53
AREA27	ESP-PS-VL2440	65798201.16
AREA27	GBR-DTS-VL1218	61961403.56
AREA27	NLD-TBB-VL1824	59683710
AREA27	DNK-DTS-VL2440	55133495.13
AREA27	BEL-TBB-VL2440	52254320.77
AREA27	FRA-DFN-VL1012	50778523.32
AREA27	IRL-DTS-VL1824	48657194.53
AREA27	FRA-DTS-VL40XX	44880452.78
AREA27	PRT-DTS-VL2440	44224170
AREA27	DEU-DTS-VL40XX	43509134
AREA27	ESP-PS-VL1824	42684202.59
AREA27	DNK-DTS-VL1824	41816299.75
AREA27	IRL-DTS-VL2440	40802144.83
AREA27	PRT-PS-VL1824	40626832

Area 37 – Mediterranean and Black Sea

18 fleet segments (11%) produce 80% of the landing values

supra_reg	fleet_code	values
AREA37	ITA-PS-VL40XX	15049263.2
AREA37	ESP-DTS-VL1218	19090224.8
AREA37	ITA-HOK-VL1218	20036698.7
AREA37	ITA-PS-VL2440	21135292.5
AREA37	ESP-PS-VL1218	21842622.2
AREA37	ESP-PGP-VL0612	23840877.8
AREA37	ESP-PS-VL2440	26567390.1
AREA37	ITA-TM-VL2440	31515363.9
AREA37	ESP-PS-VL1824	33016105.3
AREA37	ITA-PGP-VL1218	35435134.2
AREA37	ESP-DTS-VL2440	40855056.8
AREA37	ITA-PGP-VL0006	44794989
AREA37	ITA-DRB-VL1218	51959313.1
AREA37	ESP-DTS-VL1824	67356442.6
AREA37	ITA-DTS-VL2440	87354066.8
AREA37	ITA-DTS-VL1824	165997245
AREA37	ITA-DTS-VL1218	168942777
AREA37	ITA-PGP-VL0612	196675096

AREA27	ESP-PGP-VL0010	39492140.67
AREA27	FRA-DTS-VL1012	38219845.84
AREA27	FRA-DFN-VL1218	37953214.54
AREA27	DNK-DTS-VL40XX	37410481.54
AREA27	DNK-DTS-VL1218	35446974.8
AREA27	GBR-DTS-VL40XX	34585008.52
AREA27	FRA-DRB-VL1218	32041801.75
AREA27	DEU-TBB-VL1218	31113099
AREA27	ESP-PS-VL1218	29280821.16
AREA27	FRA-DFN-VL1824	29089910
AREA27	FRA-DFN-VL2440	28711523.66
AREA27	GBR-DRB-VL2440	27905972.14
AREA27	SWE-TM-VL40XX	27360950.05
AREA27	FRA-TM-VL1824	26907816.96
AREA27	NLD-DTS-VL2440	26905891
AREA27	NLD-TBB-VL2440	26721749
AREA27	PRT-PGP-VL0010	26185527
AREA27	ESP-DTS-VL1218	25647072.3
AREA27	POL-TM-VL2440	24189865.95
AREA27	DEU-TBB-VL1824	23710495
AREA27	ESP-DRB-VL0010	23334723.46
AREA27	GBR-FPO-VL1218	22361871.33
AREA27	FRA-FPO-VL0010	21953717.29
AREA27	SWE-DTS-VL1824	21925512.49
AREA27	GBR-DRB-VL1218	21828790.09
AREA27	ESP-DTS-VL1824	21812547.93
AREA27	GBR-FPO-VL1012	21435517.68
AREA27	FRA-DFN-VL0010	21284639.42
AREA27	FRA-HOK-VL0010	20462105.86
AREA27	FIN-TM-VL2440	20047000.85
AREA27	IRL-TM-VL2440	19519833.59
AREA27	GBR-TBB-VL40XX	18228248.25
AREA27	SWE-DTS-VL2440	17955572.82
AREA27	PRT-PS-VL2440	17903900
AREA27	FRA-PS-VL1218	17525788.65
AREA27	GBR-TBB-VL2440	17433104.71
AREA27	LVA-TM-VL2440	17369795
AREA27	GBR-DTS-VL0010	17358323.69
AREA27	ESP-DFN-VL1218	17312170.54
AREA27	FRA-DRB-VL1012	16693215.91
AREA27	SWE-DTS-VL1218	16183646.49

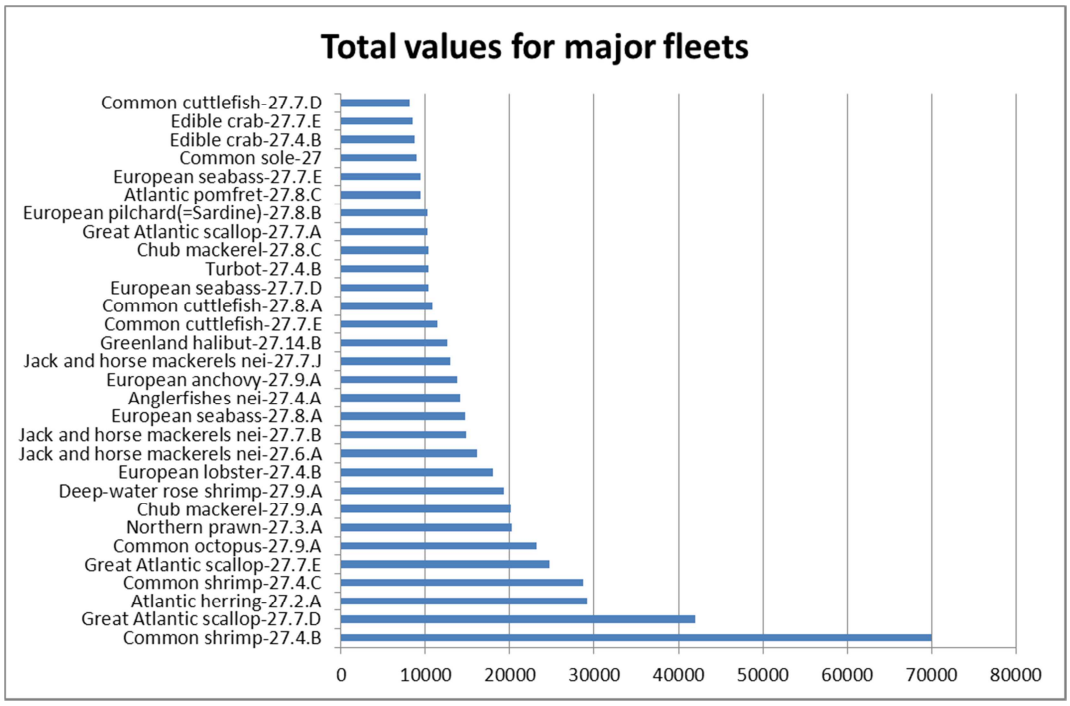

Figure 1. Thirty most important stocks in FAO major fishing Area 27 - Northeast Atlantic (based on catch values) targeted by fleet segments which together generated 80% of total landings values and for which no stock assessment data is available. X-axis shows value in Euros.

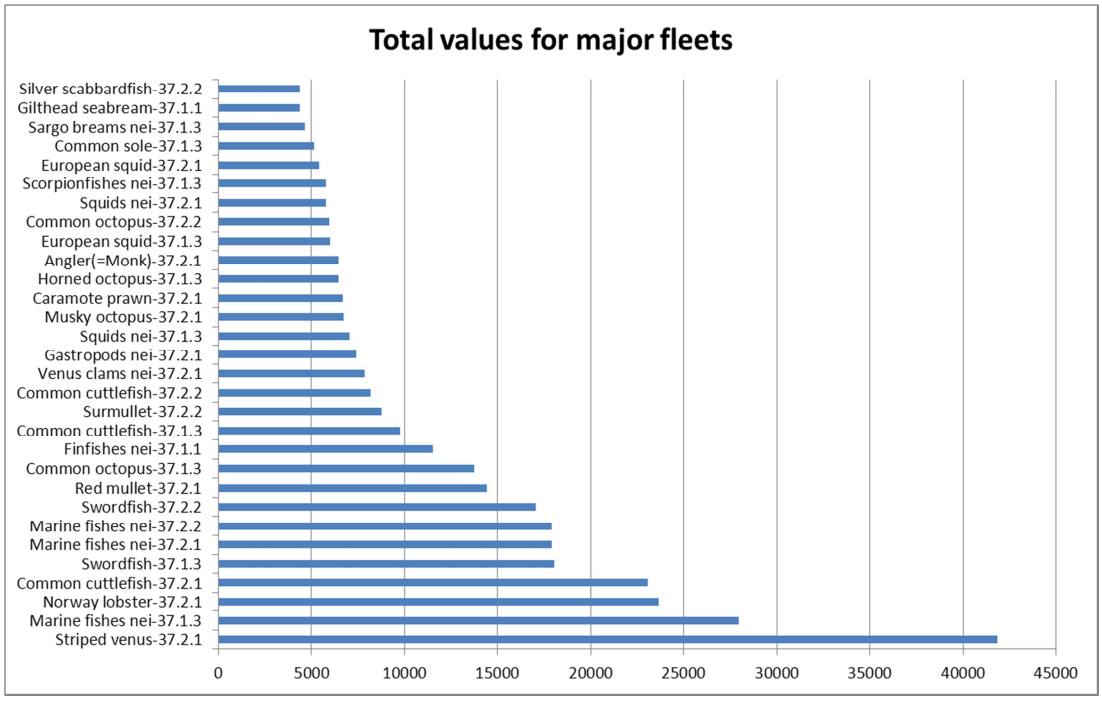

Figure 2. Thirty most important stocks in FAO major fishing Area 37 – Mediterranean and Black Sea (based on catch values) targeted by fleet segments which together generated 80% of total landings values and for which no stock assessment data is available. X-axis shows value in Euros.

9 ANNEX III – COMPLIMENTARY DATA FOR THE SUSTAINABLE HARVEST INDICATOR

Information on the number of stocks for which assessments are available and the number of stocks considered overfished (Fcurrent > Fmsy or its proxy F0.1 in 2012), provided by MS fleet segment.

Supra region	Country	Fleet code	Number of stocks assessed	Number of stocks overfished
27	BEL	BEL-DFN-VL1218	4	2
27	BEL	BEL-DFN-VL1824	5	4
27	BEL	BEL-DRB-VL1824	11	8
27	BEL	BEL-DTS-VL1012	5	3
27	BEL	BEL-DTS-VL1218	3	2
27	BEL	BEL-DTS-VL1824	16	10
27	BEL	BEL-DTS-VL2440	18	12
27	BEL	BEL-TBB-VL1218	5	4
27	BEL	BEL-TBB-VL1824	15	9
27	BEL	BEL-TBB-VL2440	19	13
27	DEU	DEU-DFN-VL1218	8	6
27	DEU	DEU-DFN-VL2440	8	5
27	DEU	DEU-DTS-VL1012	4	3
27	DEU	DEU-DTS-VL1218	6	5
27	DEU	DEU-DTS-VL1824	11	7
27	DEU	DEU-DTS-VL2440	14	8
27	DEU	DEU-DTS-VL40XX	9	5
27	DEU	DEU-PG-VL0010	4	2
27	DEU	DEU-PG-VL1012	4	3
27	DEU	DEU-TBB-VL1012	3	1
27	DEU	DEU-TBB-VL1218	5	4
27	DEU	DEU-TBB-VL1824	6	4
27	DEU	DEU-TBB-VL2440	6	3
27	DNK	DNK-DRB-VL1012	5	3
27	DNK	DNK-DRB-VL1218	4	3
27	DNK	DNK-DTS-VL0010	9	6
27	DNK	DNK-DTS-VL1012	9	5
27	DNK	DNK-DTS-VL1218	14	8
27	DNK	DNK-DTS-VL1824	15	8
27	DNK	DNK-DTS-VL2440	14	7
27	DNK	DNK-DTS-VL40XX	10	4
27	DNK	DNK-PGP-VL0010	13	8
27	DNK	DNK-PGP-VL1012	11	7
27	DNK	DNK-PGP-VL1218	9	6
27	DNK	DNK-PMP-VL0010	12	8
27	DNK	DNK-PMP-VL1012	12	7
27	DNK	DNK-PMP-VL1218	12	8
27	DNK	DNK-PMP-VL1824	7	4
27	DNK	DNK-TBB-VL1218	8	5
27	DNK	DNK-TBB-VL1824	9	6
27	DNK	DNK-TM-VL1218	13	6
27	DNK	DNK-TM-VL40XX	9	3
27	ESP	ESP-DFN-VL0010	4	1
27	ESP	ESP-DFN-VL0612	1	1
27	ESP	ESP-DFN-VL1012	8	3
27	ESP	ESP-DFN-VL1218	10	5
27	ESP	ESP-DFN-VL1824	9	4
27	ESP	ESP-DFN-VL2440	10	6
27	ESP	ESP-DRB-VL0010	7	3
27	ESP	ESP-DTS-VL0612	2	1
27	ESP	ESP-DTS-VL1012	1	1
27	ESP	ESP-DTS-VL1218	7	3
27	ESP	ESP-DTS-VL1824	9	5
27	ESP	ESP-DTS-VL2440	14	7
27	ESP	ESP-DTS-VL40XX	9	4
27	ESP	ESP-FPO-VL1012	8	3
27	ESP	ESP-FPO-VL1218	9	4

27	ESP	ESP-HOK-VL0010	5	1
27	ESP	ESP-HOK-VL0612	2	
27	ESP	ESP-HOK-VL1012	9	4
27	ESP	ESP-HOK-VL1218	12	6
27	ESP	ESP-HOK-VL1824	7	2
27	ESP	ESP-HOK-VL2440	13	4
27	ESP	ESP-PGP-VL0006	2	
27	ESP	ESP-PGP-VL0010	8	3
27	ESP	ESP-PGP-VL0612	2	
27	ESP	ESP-PGP-VL1012	6	1
27	ESP	ESP-PGP-VL1218	10	3
27	ESP	ESP-PGP-VL2440	1	1
27	ESP	ESP-PS-VL1012	6	2
27	ESP	ESP-PS-VL1218	7	2
27	ESP	ESP-PS-VL1824	8	3
27	ESP	ESP-PS-VL2440	4	1
27	EST	EST-DTS-VL1218	2	
27	EST	EST-DTS-VL2440	2	2
27	EST	EST-PG-VL0010	3	2
27	EST	EST-PG-VL1012	2	1
27	EST	EST-TM-VL1218	3	1
27	EST	EST-TM-VL1824	3	1
27	EST	EST-TM-VL2440	4	2
27	FIN	FIN-PG-VL0010	4	1
27	FIN	FIN-PG-VL1012	4	1
27	FIN	FIN-TM-VL1218	4	1
27	FIN	FIN-TM-VL1824	3	
27	FIN	FIN-TM-VL2440	4	1
27	FRA	FRA-DFN-VL0010	21	11
27	FRA	FRA-DFN-VL0612	2	1
27	FRA	FRA-DFN-VL1012	27	14
27	FRA	FRA-DFN-VL1218	24	14
27	FRA	FRA-DFN-VL1824	19	11
27	FRA	FRA-DFN-VL2440	16	10
27	FRA	FRA-DRB-VL0010	10	8
27	FRA	FRA-DRB-VL1012	16	11
27	FRA	FRA-DRB-VL1218	14	9
27	FRA	FRA-DRB-VL1824	10	7
27	FRA	FRA-DRB-VL2440	2	2
27	FRA	FRA-DTS-VL0010	14	9
27	FRA	FRA-DTS-VL1012	19	11
27	FRA	FRA-DTS-VL1218	24	14
27	FRA	FRA-DTS-VL1824	28	17
27	FRA	FRA-DTS-VL2440	29	17
27	FRA	FRA-DTS-VL40XX	16	9
27	FRA	FRA-FPO-VL0010	16	9
27	FRA	FRA-FPO-VL1012	8	5
27	FRA	FRA-FPO-VL1218	9	5
27	FRA	FRA-HOK-VL0010	16	9
27	FRA	FRA-HOK-VL1012	16	9
27	FRA	FRA-HOK-VL1218	6	4
27	FRA	FRA-HOK-VL1824	7	5
27	FRA	FRA-HOK-VL2440	12	8
27	FRA	FRA-MGO-VL0010	8	6
27	FRA	FRA-MGO-VL1012	6	3
27	FRA	FRA-MGP-VL0010	8	6
27	FRA	FRA-MGP-VL1012	13	9
27	FRA	FRA-MGP-VL1218	14	9
27	FRA	FRA-MGP-VL1824	10	6
27	FRA	FRA-MGP-VL2440	7	4
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27	FRA	FRA-PGP-VL0010	13	9
27	FRA	FRA-PGP-VL1012	10	7
27	FRA	FRA-PGP-VL1218	3	2
27	FRA	FRA-PMP-VL0010	12	9
27	FRA	FRA-PMP-VL1012	14	10
27	FRA	FRA-PMP-VL1218	12	9

27	FRA	FRA-PS-VL0010	3	2
27	FRA	FRA-PS-VL1012	3	1
27	FRA	FRA-PS-VL1218	6	4
27	FRA	FRA-PS-VL1824	4	1
27	FRA	FRA-TBB-VL0010	2	2
27	FRA	FRA-TBB-VL1012	5	4
27	FRA	FRA-TBB-VL1218	10	7
27	FRA	FRA-TM-VL1012	5	3
27	FRA	FRA-TM-VL1218	15	9
27	FRA	FRA-TM-VL1824	17	10
27	FRA	FRA-TM-VL2440	7	5
27	FRA	FRA-TM-VL40XX	5	
27	GBR	GBR-DFN-VL0010	20	12
27	GBR	GBR-DFN-VL1012	17	11
27	GBR	GBR-DFN-VL1218	13	9
27	GBR	GBR-DFN-VL1824	9	5
27	GBR	GBR-DFN-VL2440	3	2
27	GBR	GBR-DRB-VL0010	18	12
27	GBR	GBR-DRB-VL1012	14	9
27	GBR	GBR-DRB-VL1218	20	13
27	GBR	GBR-DRB-VL1824	6	5
27	GBR	GBR-DRB-VL2440	13	10
27	GBR	GBR-DTS-VL0010	22	13
27	GBR	GBR-DTS-VL1012	18	11
27	GBR	GBR-DTS-VL1218	23	13
27	GBR	GBR-DTS-VL1824	24	14
27	GBR	GBR-DTS-VL2440	22	14
27	GBR	GBR-DTS-VL40XX	21	12
27	GBR	GBR-FPO-VL0010	19	12
27	GBR	GBR-FPO-VL1012	17	11
27	GBR	GBR-FPO-VL1218	14	8
27	GBR	GBR-HOK-VL0010	19	12
27	GBR	GBR-HOK-VL1012	8	4
27	GBR	GBR-HOK-VL2440	2	1
27	GBR	GBR-MGP-VL0010	13	7
27	GBR	GBR-MGP-VL1012	12	8
27	GBR	GBR-MGP-VL1218	12	8
27	GBR	GBR-PGP-VL0010	18	12
27	GBR	GBR-PMP-VL0010	10	6
27	GBR	GBR-PS-VL0010	3	1
27	GBR	GBR-PS-VL1218	11	5
27	GBR	GBR-PS-VL2440	1	1
27	GBR	GBR-PS-VL40XX	11	2
27	GBR	GBR-TBB-VL0010	4	2
27	GBR	GBR-TBB-VL1012	6	5
27	GBR	GBR-TBB-VL1218	12	9
27	GBR	GBR-TBB-VL1824	14	10
27	GBR	GBR-TBB-VL2440	13	9
27	GBR	GBR-TBB-VL40XX	7	4
27	IRL	IRL-DFN-VL1012	8	5
27	IRL	IRL-DFN-VL1218	6	3
27	IRL	IRL-DFN-VL1824	7	4
27	IRL	IRL-DFN-VL2440	4	3
27	IRL	IRL-DTS-VL1012	11	6
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27	IRL	IRL-FPO-VL1012	11	7
27	IRL	IRL-FPO-VL1218	6	4
27	IRL	IRL-HOK-VL1012	1	
27	IRL	IRL-PMP-VL1012	1	
27	IRL	IRL-PMP-VL1218	3	1
27	IRL	IRL-PMP-VL1824	10	4
27	IRL	IRL-TBB-VL1824	7	6
27	IRL	IRL-TBB-VL2440	7	6
27	IRL	IRL-TM-VL1012	4	
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27	IRL	IRL-TM-VL1824	8	4
27	IRL	IRL-TM-VL2440	8	1
27	IRL	IRL-TM-VL40XX	7	1
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27	LTU	LTU-DTS-VL40XX	1	
27	LTU	LTU-PG-VL0010	2	1
27	LTU	LTU-TM-VL2440	4	2
27	LTU	LTU-TM-VL40XX	3	1
27	LVA	LVA-DFN-VL2440	2	2
27	LVA	LVA-PGP-VL0010	3	2
27	LVA	LVA-TM-VL1218	3	1
27	LVA	LVA-TM-VL2440	4	2
27	NLD	NLD-DTS-VL0010	5	2
27	NLD	NLD-DTS-VL1824	12	7
27	NLD	NLD-DTS-VL2440	13	8
27	NLD	NLD-PG-VL0010	6	3
27	NLD	NLD-TBB-VL1218	1	1
27	NLD	NLD-TBB-VL1824	6	3
27	NLD	NLD-TBB-VL2440	9	4
27	NLD	NLD-TBB-VL40XX	10	5
27	NLD	NLD-TM-VL40XX	5	1
27	POL	POL-DFN-VL1218	3	2
27	POL	POL-DTS-VL1218	5	3
27	POL	POL-DTS-VL1824	5	3
27	POL	POL-PG-VL0010	4	3
27	POL	POL-PG-VL1012	5	3
27	POL	POL-TM-VL2440	6	4
27	PRT	PRT-DFN-VL0010	5	1
27	PRT	PRT-DFN-VL1012	11	5
27	PRT	PRT-DFN-VL1218	10	4
27	PRT	PRT-DFN-VL1824	9	3
27	PRT	PRT-DRB-VL1012	5	3
27	PRT	PRT-DTS-VL0010	8	3
27	PRT	PRT-DTS-VL1012	2	1
27	PRT	PRT-DTS-VL1218	7	3
27	PRT	PRT-DTS-VL1824	7	3
27	PRT	PRT-DTS-VL2440	10	5
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27	PRT	PRT-FPO-VL1218	8	3
27	PRT	PRT-FPO-VL1824	6	3
27	PRT	PRT-HOK-VL0010	5	1
27	PRT	PRT-HOK-VL1012	2	1
27	PRT	PRT-HOK-VL1218	9	3
27	PRT	PRT-HOK-VL1824	8	1
27	PRT	PRT-HOK-VL2440	7	1
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27	PRT	PRT-PGP-VL1218	6	3
27	PRT	PRT-PMP-VL0010	9	3
27	PRT	PRT-PMP-VL1012	2	
27	PRT	PRT-PMP-VL1218	4	1
27	PRT	PRT-PMP-VL2440	2	
27	PRT	PRT-PS-VL0010	5	1
27	PRT	PRT-PS-VL1012	5	2
27	PRT	PRT-PS-VL1218	5	1
27	PRT	PRT-PS-VL1824	5	
27	PRT	PRT-PS-VL2440	3	1
27	SWE	SWE-DFN-VL0010	11	7
27	SWE	SWE-DFN-VL1012	12	7
27	SWE	SWE-DFN-VL1218	6	4
27	SWE	SWE-DTS-VL0010	7	4
27	SWE	SWE-DTS-VL1012	11	6
27	SWE	SWE-DTS-VL1218	12	7

27	SWE	SWE-DTS-VL1824	15	8
27	SWE	SWE-DTS-VL2440	15	8
27	SWE	SWE-FPO-VL0010	10	6
27	SWE	SWE-FPO-VL1012	10	6
27	SWE	SWE-HOK-VL0010	5	4
27	SWE	SWE-HOK-VL1012	6	4
27	SWE	SWE-HOK-VL1218	7	5
27	SWE	SWE-PGP-VL0010	7	4
27	SWE	SWE-PGP-VL1012	7	6
27	SWE	SWE-PMP-VL0010	4	2
27	SWE	SWE-PMP-VL1012	4	3
27	SWE	SWE-PMP-VL1218	4	2
27	SWE	SWE-PS-VL0010	1	
27	SWE	SWE-PS-VL1012	2	1
27	SWE	SWE-PS-VL1218	1	
27	SWE	SWE-PS-VL2440	8	3
27	SWE	SWE-TM-VL2440	10	4
27	SWE	SWE-TM-VL40XX	10	3
37	BGR	BGR-DFN-VL0006	5	4
37	BGR	BGR-DFN-VL0612	5	4
37	BGR	BGR-DFN-VL1218	4	3
37	BGR	BGR-DFN-VL1824	2	2
37	BGR	BGR-DFN-VL2440	2	2
37	BGR	BGR-HOK-VL0006	2	2
37	BGR	BGR-HOK-VL0612	3	2
37	BGR	BGR-HOK-VL1218	2	2
37	BGR	BGR-HOK-VL1824	2	1
37	BGR	BGR-HOK-VL2440	1	1
37	BGR	BGR-PG-VL0006	3	2
37	BGR	BGR-PG-VL0612	3	2
37	BGR	BGR-PMP-VL0006	3	2
37	BGR	BGR-PMP-VL0612	3	2
37	BGR	BGR-TM-VL0006	1	
37	BGR	BGR-TM-VL0612	2	2
37	BGR	BGR-TM-VL1218	3	2
37	BGR	BGR-TM-VL1824	3	2
37	BGR	BGR-TM-VL2440	3	2
37	CYP	CYP-DTS-VL1824	9	9
37	CYP	CYP-PGP-VL1218	6	5
37	CYP	CYP-PG-VL0612	5	5
37	ESP	ESP-DFN-VL0612	24	24
37	ESP	ESP-DFN-VL1012	13	13
37	ESP	ESP-DFN-VL1218	28	26
37	ESP	ESP-DFN-VL1824	5	5
37	ESP	ESP-DRB-VL0006	1	1
37	ESP	ESP-DRB-VL0612	13	13
37	ESP	ESP-DRB-VL1218	19	19
37	ESP	ESP-DTS-VL0612	28	26
37	ESP	ESP-DTS-VL1218	30	28
37	ESP	ESP-DTS-VL1824	54	49
37	ESP	ESP-DTS-VL2440	37	34
37	ESP	ESP-FPO-VL0612	17	15
37	ESP	ESP-FPO-VL1012	16	16
37	ESP	ESP-FPO-VL1218	13	13
37	ESP	ESP-HOK-VL0006	6	6
37	ESP	ESP-HOK-VL0010	4	3
37	ESP	ESP-HOK-VL0612	21	20
37	ESP	ESP-HOK-VL1012	1	1
37	ESP	ESP-HOK-VL1218	29	26
37	ESP	ESP-HOK-VL1824	12	10
37	ESP	ESP-HOK-VL2440	2	1
37	ESP	ESP-PGP-VL0006	18	16
37	ESP	ESP-PGP-VL0612	29	26
37	ESP	ESP-PGP-VL1218	15	15
37	ESP	ESP-PS-VL0612	18	16
37	ESP	ESP-PS-VL1218	22	20
37	ESP	ESP-PS-VL1824	24	22

37	ESP	ESP-PS-VL2440	15	12
37	ESP	ESP-PS-VL40XX	1	
37	FRA	FRA-DFN-VL0006	11	11
37	FRA	FRA-DFN-VL0612	17	16
37	FRA	FRA-DFN-VL1218	9	9
37	FRA	FRA-DRB-VL0612	1	1
37	FRA	FRA-DTS-VL1012	1	1
37	FRA	FRA-DTS-VL1218	11	10
37	FRA	FRA-DTS-VL1824	4	3
37	FRA	FRA-DTS-VL2440	13	12
37	FRA	FRA-FPO-VL0010	1	1
37	FRA	FRA-FPO-VL0612	3	2
37	FRA	FRA-FPO-VL1218	1	1
37	FRA	FRA-HOK-VL0612	8	7
37	FRA	FRA-HOK-VL1218	1	
37	FRA	FRA-MGO-VL0612	1	1
37	FRA	FRA-MGO-VL1012	2	1
37	FRA	FRA-PGP-VL0006	2	2
37	FRA	FRA-PGP-VL0612	14	12
37	FRA	FRA-PGP-VL1218	3	2
37	FRA	FRA-PMP-VL0006	2	2
37	FRA	FRA-PMP-VL0612	5	4
37	FRA	FRA-PMP-VL1218	2	1
37	FRA	FRA-PS-VL0612	1	1
37	FRA	FRA-PS-VL1218	1	
37	FRA	FRA-PS-VL2440	1	
37	FRA	FRA-PS-VL40XX	1	
37	FRA	FRA-TM-VL2440	4	4
37	HRV	HRV-DFN-VL0006	9	9
37	HRV	HRV-DFN-VL0612	11	11
37	HRV	HRV-DFN-VL1218	5	5
37	HRV	HRV-DFN-VL2440	2	2
37	HRV	HRV-DRB-VL0612	7	7
37	HRV	HRV-DRB-VL1218	9	9
37	HRV	HRV-DTS-VL0006	6	6
37	HRV	HRV-DTS-VL0612	11	11
37	HRV	HRV-DTS-VL1218	11	11
37	HRV	HRV-DTS-VL1824	7	7
37	HRV	HRV-DTS-VL2440	5	5
37	HRV	HRV-FPO-VL0612	2	2
37	HRV	HRV-HOK-VL0006	5	5
37	HRV	HRV-HOK-VL0612	10	9
37	HRV	HRV-HOK-VL1218	1	
37	HRV	HRV-MGO-VL0006	9	9
37	HRV	HRV-MGO-VL0612	9	9
37	HRV	HRV-PGP-VL0612	5	5
37	HRV	HRV-PMP-VL0006	7	7
37	HRV	HRV-PMP-VL0612	9	9
37	HRV	HRV-PMP-VL1218	5	5
37	HRV	HRV-PS-VL0612	9	9
37	HRV	HRV-PS-VL1218	9	9
37	HRV	HRV-PS-VL1824	6	6
37	HRV	HRV-PS-VL2440	6	6
37	HRV	HRV-PS-VL40XX	4	4
37	ITA	ITA-DTS-VL0612	45	42
37	ITA	ITA-DTS-VL1218	49	46
37	ITA	ITA-DTS-VL1824	49	46
37	ITA	ITA-DTS-VL2440	48	45
37	ITA	ITA-HOK-VL1218	12	11
37	ITA	ITA-HOK-VL1824	2	1
37	ITA	ITA-PGP-VL0006	33	32
37	ITA	ITA-PGP-VL0612	40	37
37	ITA	ITA-PGP-VL1218	36	33
37	ITA	ITA-PMP-VL0612	5	5
37	ITA	ITA-PS-VL0612	6	6
37	ITA	ITA-PS-VL1218	7	6
37	ITA	ITA-PS-VL1824	2	2

37	ITA	ITA-PS-VL2440	7	6
37	ITA	ITA-PS-VL40XX	1	
37	ITA	ITA-TBB-VL1218	3	3
37	ITA	ITA-TBB-VL1824	7	7
37	ITA	ITA-TBB-VL2440	9	9
37	ITA	ITA-TM-VL1218	11	11
37	ITA	ITA-TM-VL1824	5	5
37	ITA	ITA-TM-VL2440	8	8
37	MLT	MLT-DFN-VL0006	2	2
37	MLT	MLT-DFN-VL0612	4	4
37	MLT	MLT-DTS-VL1824	14	13
37	MLT	MLT-DTS-VL2440	14	13
37	MLT	MLT-HOK-VL0612	5	4
37	MLT	MLT-HOK-VL1218	4	3
37	MLT	MLT-HOK-VL1824	6	5
37	MLT	MLT-HOK-VL2440	1	
37	MLT	MLT-MGO-VL0612	4	4
37	MLT	MLT-MGO-VL1218	6	5
37	MLT	MLT-MGO-VL1824	1	
37	MLT	MLT-PGP-VL0006	5	5
37	MLT	MLT-PGP-VL0612	5	4
37	MLT	MLT-PMP-VL0612	7	6
37	MLT	MLT-PS-VL2440	1	1
37	PRT	PRT-DTS-VL1218	6	6
37	PRT	PRT-DTS-VL2440	10	10
37	ROU	ROU-PGO-VL1218	3	3
37	ROU	ROU-PGP-VL1824	2	2
37	ROU	ROU-PG-VL0006	3	2
37	ROU	ROU-PG-VL0612	7	6
37	ROU	ROU-PMP-VL0612	3	2
37	ROU	ROU-PMP-VL2440	5	4
37	SVN	SVN-DFN-VL0006	11	11
37	SVN	SVN-DFN-VL0612	11	11
37	SVN	SVN-DTS-VL1218	11	11
37	SVN	SVN-PS-VL1218	7	7

10 ANNEX IV – PROPOSED NEW VERSION OF GUIDELINES

Guidelines for the analysis of the balance between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy [23].

1. Introduction

The new Common Fisheries Policy confirms the need for measures to manage fishing capacity: Member States are required to put in place measures to adjust the fishing capacity of their fleets to their fishing opportunities over time. The analysis and evaluation of the balance between the fleets and the resources that they exploit is carried out by each Member State, in accordance with the present common guidelines developed by the Commission[24]. These guidelines should also be used for the purpose of the Commission's annual report to the Council and Parliament on the balance between the fishing capacity of member States' fleets and their fishing opportunities[25].

The common guidelines developed by the Commission will also play an important role from 2014 onwards by establishing a direct link between each Member State's fleet report and fleet measures under the new European Maritime and Fisheries Fund (EMFF)[26], which will continue to make available public support for the permanent cessation of fishing vessels in the 2014-2020 period[27]. A specific ex-ante conditionality related to the fleet report has been established, which may have a direct impact on the achievement of the specific objectives of the new EMFF[28]. Under the rules of the EMFF, support for permanent cessation is limited and targeted to cases where a fleet segment is not effectively balanced with fishing opportunities available to that segment[29].

The new fleet report guidelines contained in this document set out a common approach for the estimation of the balance over time between fishing capacity and fishing opportunities. Account needs to be taken of the available fishing opportunities as well as of the impact of the fleets upon them. To this end, it is recommended to assess, for each fleet segment, the extent to which each fleet relies on stocks that are fished above the target rates, and to assess how many stocks that make up a significant part of their catches are at biological risk due to low abundance and are significantly affected by the fleet. Such an approach may identify

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[23] Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision/585/EC, OJ L 354/22 of 28.12.2013.

[24] Article 22 (2) of Regulation (EU) No 1380/2013.

[25] Article 22 (4), second subparagraph of Regulation (EU) No 1380/2013.

[26] Regulation (EU) No 508/2014 of Parliament of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund and repealing Council Regulations (EC) No 2328/2003, (EC) No 861/2006, (EC) No 1198/2006 and (EC) No 791/2007 and Regulation (EU) No 1255/2011 of the European Parliament and of the Council, OJ L 149/1 of 20.05.2014.

[27] Public support for permanent cessation under the EMFF is also limited in time (31 December 2017).

[28] Annex IV to Regulation (EU) No 508/2014.

[29] Article 34 (1) point (b) of Regulation (EU) No 508/2014.

fleet segments that can be considered as candidates for management actions by Member States in their attempts to align fishing capacity with available fishing opportunities. Other sources of information may also indicate other candidate fleet segments, for instance, unprofitable or underused fleet segments. Where many vessels in a fishing fleet segment are recurrently or permanently tied up and inactive, or where many vessels spend less time fishing than they could, then in some cases, this may indicate overcapacity and such a segment could be a candidate for specific management actions, particularly if economic performance is poor.

2. Purpose and Principles

The purpose of these guidelines is to provide a common methodology to assist Member States and the Commission to arrive at an assessment of the balance over time between fleet capacity and fishing opportunities at the fleet segment level.

These guidelines aim to:

- Use standard methods to ensure a level playing field when different fleet segments are being compared;
- Follow best possible scientific, economic and technical practices[30], and ensure compatibility with standard biological, economic and social assessments;
- Use data collected according to the Data Collection Framework to facilitate comparisons and to avoid duplication of work.

The fleet segment assessment should be a synthesis assessment taking into account the values of all the relevant indicators outlined in these guidelines and any other relevant information. It is important to note that no single indicator used in isolation can provide an assessment of whether the capacity of a fleet segment is in balance with available fishing opportunities. The indicator values need to be considered in combination and there are a range of other potential factors that may need to be taken into account in order to take a decision on appropriate and effective management actions. A proposed standard methodology to assist in deriving an overall assessment for each fleet segment is described below.

3. Measuring the Parameters

Member States are invited to calculate values for a small number of biological, economic and technical indicators each year in an attempt to assess whether the capacity of fleet segments are in balance with available fishing opportunities. In order to keep the workload manageable and to have standardised analyses, the indicator values should primarily be based on data collected under the Data Collection Framework[31], although other data and information may need to be taken into account in order to correctly interpret the indicator values.

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[30] These guidelines are based in on advice from the STECF (SGBRE 10-01, EWG 11-10 and PLEN 10-03), including comments by four Member States, and taking into account experience in 2013 reported on in STECF EWG 13-28, 14-12 and 14-21.

[31] See Council Regulation (EC) No 199/2008 of 25 February 2008, concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy, OJ L 60, 5.3.2008.

Three main types of indicators can be identified.

a) Biological indicators which are designed to reflect the extent to which each fleet segment exploits stocks that are at risk through reduced stock biomass and stocks for which the exploitation rate is too high.

b) Economic indicators which are designed to reflect short- and long-term profitability.

c) Indicators for vessel utilisation. Such indicators provide information about the economic and operational state of a fishing fleet segment, which may inform the analysis of the balance and also inform on decisions by Member States.

4. Assessing the Balance

The indicators are intended to be used in combination to inform the assessment of the balance between fleet segment capacity and available fishing opportunities. Aggregated analyses across many different fisheries in one Member State are not likely to be informative, since potential overcapacity in one segment may be masked through undercapacity in others.

In general, fleet segments that are relying on healthy stocks and are also profitable both in the short- and long- term are less likely to be candidates for specific management actions than fleets that rely on stocks that are being exploited at rates that are not consistent with MSY or on stocks that are at risk as a result of low biomass.

Fleet segments with poor economic performance which are fishing healthy stocks may face low profitability related to factors such as low sales price of the fish, high production costs, consumer preferences, low demand, increase in fuel prices, high imports, fishing skippers' experience and skills or substitution effects. Such fctors are not necessarily related to an imbalance between capacity and available resources. National authorities should monitor fleet segments in such situations to avoid negative impacts on stocks in the medium to long term.

In the absence of biological and economic indicators, vessel use indicators may be a useful means to identify those fleet segments that warrant further investigation regarding the balance between capacity and fishing opportunities.

As no single indicator can unequivocally lead to the conclusion that a fleet segment is or is not in balance with available fishing opportunities, Member States should consider the combined values for all available indicators in drawing any conclusions with regard to whether the capacity of fleet segements is in balance with available fishing opportunities. The conclusions drawn by Member States following their assessment of balance should be accompanied by supporting arguments irrespective of the indicator values.

5. Progressive Implementation

The overall objective should be that Member States achieve a stable and enduring balance between the fishing capacity of their fleets and their fishing opportunties over time. For many stocks, available fishing opportunites do not necessarily correspond to those that are consistent with the objective to deliver MSY e.g. in cases where current management measures are designed to achieve a gradual transition to achieving this objective. In such situations indicator values are likely to exceed those corresponding to the MSY and Member States should indicate in their annual reports when this is the case.

6. Action Plan

For the fleet segments that are clearly demonstrated not to be to in balance with available fishing opportunities, the Member State concerned shall prepare and include in the report on the balance between fishing capacity and fishing opportunities, an action plan that sets out the adjustment targets and tools to achieve a balance and a clear time-frame for its implementation. The action plan should clearly describe the rationale for the conclusion and the extent that the fleet segment is not in balance with available fishing opportunities and specify whether the this is due to biological, economic or technical reasons.

7. Indicators

The calculation methods for the indicators listed below are described in Section 2.6.3 of the report of STECF EWG 14-12 / 14-21.

Number of Stocks at Risk (NSR)

The NSR indicator is a measure of the number of the stocks exploited by a fleet segment that are biologically vulnerable – in other words, stocks for which spawning stock biomass is below the limit reference for that stock. The NSR value alone cannot indicate whether a fleet segment is in balance with available fishing opportunities, but it can be used to identify those fleet segments that worthy of further investigation.

Threshold: if a fleet segment takes catches from a stock for which SSB is below the limit reference, that stock should be included for the purposes of calculating the NSR indicator value.

Number of Overexploited Stocks (NOS)

The NOS essentially indicates the number of stocks for which the ratio of F/F_{MSY} is greater than 1.0 (i.e. stocks that at a particular point in time are being fished at rates that are not consistent with MSY) that are exploited by a fleet segment, provided that the catch of that fleet segment account for more than n%[32] of the total catches from that stock by all segments. This means that if a fleet segment takes a catch from a stock for which F/F_{MSY} is greater than

[32] The n% threshold is suggested as an arbitrary threshold aimed to eliminate fleet segments that catch very low levels of the stocks in question. N is expressed as 1 / Number of fleet segments. e.g if the number of fleet segment is 100 the Threshold percentage would be 1%. If the number of fleet segments is 10, then the threshold would be 10%.

1.0, but that catch, represents less than or equal to n% of the total catches from that stock, stock would not be counted in deriving the indicator value for the fleet segment.

Threshold: if a fleet segment takes more than n% of its catches from a stock for which the ratio of F/F_{MSY} is greater than 1.0, that stock should be included for the purposes of calculating the NOS indicator value.

Economic Dependency Indicator (EDI)

The EDI essentially indicates what proportion of the landings value from a fleet segment is derived from stocks for which the ratio of F/F_{MSY} is greater than 1.0 (i.e. stocks that at a particular point in time are being fished at rates that are not consistent with MSY).

The EDI represents the cumulative proportion of the revenue from such stocks to that fleet segment. The indicator can be used to inform on how reliant a particular fleet segment is on the revenue obtained from stocks that are being exploited at a rate that is not consistent with MSY. As with other indicators used in this report, the EDI cannot be used in isolation to indicate that fleet capacity is not in balance with available fishing opportunities.

Threshold: if a fleet segment takes catches from a stock for which the ratio of F/F_{MSY} is greater than 1.0, the landings value of the segment's catches from that stock should be included for the purposes of calculating the EDI indicator value.

Return on Investement (RoI)

RoI compares the long-term profitability of the fishing fleet segment to other available investments. If this value is less than the low-risk long term interest rates available elsewhere, then this suggests that the fleet segment may be overcapitalised.

Threshold: If the RoI [33] is less than zero and less than the best available long-term risk-free interest rate, this is an indication of long-term economic inefficiency which may indicate that a fleet segment is not in balance with available fishing opportunities.

Current Revenue / Break-Even Revenue (CR/BER)

CR/BER measures the economic capability of the fleet segment to keep fishing on a day-by-day basis: does income cover the pay for the crew and the fuel and running costs for the vessel? If not, this may indicate that the fleet segment is not in balance with available fishing opportunities.

Threshold: If the ratio between current revenue and break-even revenue is less than one, this is an indication of short-term economic inefficiency which may indicate that a fleet segment is not in balance with available fishing opportunities.

[33] Experience shows that the capital asset value is often not available or is not reliable. Net profit could replace ROI (or ROFTA) in such cases.

The following indicators describe how intensively vessels in a fleet segment are being utilised.

Inactive Vessel Indicator (IVI)

The Inactive Vessel indicator describes the proportion of vessels in a fleet segment that did not undertake any fishing activity for a given calendar year. Under normal conditions, it can be expected that 10% or less of the vessels in a fleet segment may be inactive, which could be due to major repairs, refits, conversions or pending sales and transfers.

Average Vessel Activity (AVA)

AVA relates to the average activity levels of vessels that carried out at least one fishing activity in a given calendar year, taking into account the seasonality of the fishery and any other restrictions in fishing activity? Under normal conditions, it can be expected that 10% or less of the vessels in a fleet segment should be inactive, which could be due to major repairs, refits, conversions or pending sales and transfers.

Threshold: it is suggested that if more than 20% of the fleet segment is recurrently inactive or if the average activity level of vessels in a fleet segment is recurrrently less than 70% of the potential, workable activity of comparable vessels, this could indicate technical inefficiency, which may imply that the segment is not in balance with available fishing opportunities and may therefore indicate that the fleet segment in question should be investivated further. Other reasons why the indicator values may exceed the suggested thresholds may include unexpected climatic or man-made events or the introduction of emergency measures under the provisions of the CFP.

8. Working Method and Use of Data

In order to avoid duplication of work and in order to keep consistency with other economic and biological data, the evaluations set out here should be calculated from data as collected and structured under the Data Collection Framework in force.

Indicator values should be calculated separately by fleet segment.

As both biolological and economic parameters vary over time, it is recommended that Member States calculate and consider time-series of at least three years when undertaking their assessments of the balance between fleet capacity and available fishing opportunities.

It is possible that consistency problems remain, particularly for the economic data and indicators. If fleet segments show erratic economic performance, Member States are expected

to check and if so indicate whether income or costs have been affected by sudden, short-term shocks.

9. Additional Information to be Included in National Fishing Fleet Reports.

In addition to the values for the indicators listed in section 7, national fishing fleet reports should also contain the following information:

(a) a description of the stocks exploited by fishing fleet segments: development(s) during recent years, including fish stocks covered by multiannual management or recovery plans;

(b) the impact on fishing capacity (kW and GT) of fishing effort reduction schemes adopted under multiannual management or recovery plans or, if appropriate, under national schemes;

(c) information on compliance with the entry/exit scheme to ensure that national maximum capacity limits are not exceeded;

(d) a summary report on the weaknesses and strengths of the fleet management system together with a plan for improvements and information on the general level of compliance with fleet policy instruments;

(e) any information on changes of the administrative procedures relevant to the management of the fleet.

It is acceptable to address these points by reference to other documents so long as they are publicly available.

(f) for fleet segments assessed not to be in balance with available fishing opportunities in recent years, and not expected to achieve balance in the near future without specific policy intervention, an action plan, setting out the adjustment targets and tools to achieve the balance should be included in the report. The action plan should prescribe a clear time frame for its implementation. Since balance may be achieved in the near future simply due to increases in the fishing opportunity, it is not necessarily essential to include an action plan to achieve balance, but such cases should be clearly identified and explained.

10. Indicator Calculation

Details of how the indicators are to be calculated should be provided in these guidelines following a decision by DG MARE on which of the proposed indicators are to be adopted and included in the Reports from Member States on the balance between capacity and fishing opportunities.

European Commission

EUR 27134 EN – Joint Research Centre – Institute for the Protection and Security of the Citizen
Title: Scientific, Technical and Economic Committee for Fisheries. Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (STECF-15-02).

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Knittweis, L., Alves, A.C., Avdic, E., Accadia, P., Brigaudeau, C., Colloca F., Daures, F., Davidjuka I., Galrito H., Gambino M., Guitton J., Goti L., Holmes, S., Iridondo A., Jung, A., Maravelias, C., Pilgrim-Morrison, S., Radu, G., Sabatella, R., Scarcella, G., Thoergersen T., Velinova, M., Virtanen, J.J., Yankova, M., Zolubas, T., Carvalho N.
EWG-14-21 members:
Knittweis, L., Alves, A.C., Casey, J., Curtin, R., Curtis, H., Daures, F., Davidjuka I., Goti L., Graham, N., Iridondo A., Jung, A., Maravelias, C., Pilgrim-Morrison, S., Tacconi F., Scarcella, G., Velinova, M., Virtanen, J.J., Yankova, M., Carvalho N.

Luxembourg: Publications Office of the European Union

2015 – 147 pp. – 21 x 29.7 cm

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

ISBN 978-92-79-46169-9

doi:10.2788/92692

LB-NA-27134-EN-N

STECF

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

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doi:10.2788/92692

ISBN 978-92-79-46169-9

Publications Office