



## Monitoring the implementation of the Common Fisheries Policy (CFP)

1 October 2018

### Summary of recommendations

Monitoring policy implementation against well-defined objectives is essential to fisheries managers' understanding of how successful their decisions are in meeting the policy's aims, and to enable public scrutiny of the management of natural resources and of decision-makers' adherence to legal requirements and political commitments.

This document includes a series of recommendations to the Scientific, Technical and Economic Committee for Fisheries (STECF) and the European Commission in the production of future annual reports monitoring the implementation of the Common Fisheries Policy (CFP):

- 1) The STECF should work with the International Council for the Exploration of the Sea (ICES), the Joint Research Centre (JRC) and stakeholders to improve the coverage of reporting on progress towards achieving the CFP's maximum sustainable yield (MSY) objectives for all stocks.
- 2) The STECF CFP monitoring report should attempt to draw more conclusions about the status of stocks without MSY-based assessments, and better describe the data gaps and limitations with respect to the MSY objectives. This should include:
  - Creating a full list of stocks used in the sampling frame with the associated ICES stock data categorisation (ICES Category 1-6) and the number of stocks in each category;
  - Continuing to report on progress towards the CFP's MSY objectives for those stocks with MSY-based assessments (ICES Category 1 & 2) using MSY-based indicators;
  - Further exploring the use of available ICES MSY-proxy reference points (some ICES Category 3 & 4 stocks);
  - Summarising the number of stocks where MSY or MSY-proxy reference points are 'unknown' and/or 'undefined' by ICES;
  - Summarising ICES qualitative evaluations of fishing pressure and stock size as a descriptive indicator of directional progress for stocks where it is not possible to report against MSY.
  - Making clearer in the report the number and proportion of stocks where  $MSY B_{trigger}$  is equal to  $B_{PA}$ , as well as the implications this has for measuring and reporting progress against the biomass part of the CFP's MSY objective.
- 3) The STECF should improve the biomass indicators that measure progress against the objective to restore and maintain stocks above  $B_{MSY}$ . This should include:
  - Obtaining and using available ICES calculations of  $B_{MSY}$  ( $B_{MSY}$  proxy) in their analysis and reporting.
  - Considering interim  $B_{MSY}$  proxy estimates for use as indicators in future reports (e.g. a factor of  $B_{PA}$  ( $2*B_{PA}$ ) or suitable alternatives).

- Developing indicators that will show the ‘number of stocks by year where SSB is above and below  $B_{MSY}$  or  $B_{MSY}$  proxy’ and ‘trend in SSB/ $B_{MSY}$  or  $B_{MSY}$  proxy’. In the interim the same types of indicators but with respect to  $MSY B_{trigger}$  should be explored.
  - Upgrading the new indicator ‘Stocks with F above/below  $F_{MSY}$  or SSB below/above  $MSY B_{trigger}$ ’ to ‘F above/below  $F_{MSY}$  or SSB below/above  $B_{MSY}$ ’ when a suitable number of  $B_{MSY}$  estimates become available.
- 4) The STECF should continue to regularly review, improve and develop their ‘experimental’ indicators. This could include exploring the use of the following:
- ‘Trend in SSB/ $MSY B_{trigger}$ ’ and ‘Trend in SSB/ $B_{MSY}$  or  $B_{MSY}$  proxy’, when a suitable number of  $B_{MSY}$  estimates become available;
  - ‘Number and proportion of stocks below or above available  $MSY B_{trigger}$ ’ reference points until a suitable number of  $B_{MSY}$  estimates are available;
  - New ‘indicators of advice coverage’ e.g. the number of stocks and associated TACs for which  $F_{MSY}$  proxy and  $MSY B_{trigger}$  proxy reference points are available (i.e. ICES categories 3 and 4 stocks), and where possible the number of stocks and associated TACs for which  $B_{MSY}$  and  $B_{MSY}$  proxy estimates are available from ICES.
- 5) The STECF should add governance indicators to its CFP monitoring report, such as:
- Assessing whether fishing limits proposed by the Commission and set by Council are in line to the objectives of the CFP, both in terms of ending overfishing and of rebuilding stocks above levels capable of producing MSY;
  - Addressing mismatches between biological stock units and management areas, and how the scientific advice is translated into total allowable catch (TAC) proposals and decisions.
- 6) The STECF intention to explore additional ecosystem and socio-economic indicators is welcome and potentially useful but should not detract from efforts to further improve the reporting on progress against the MSY objectives for all stocks.
- 7) The European Commission should include requests in its Framework Partnership Agreement and annual grants with ICES the necessary call for data and information on  $B_{MSY}$  to adequately report on progress in meeting the CFP’s objectives.

## Background

The Common Fisheries Policy (CFP)<sup>1</sup> includes, in its Article 50, a requirement for the European Commission to report annually on the progress in achieving maximum sustainable yield (MSY) and on the status of fish stocks. To guide decision-making and meet this legal requirement, the Commission publishes a “Communication” each summer that reports on progress in ending overfishing and rebuilding fish stocks. This report draws heavily on the findings of the Scientific, Technical and Economic Committee for Fisheries (STECF) annual report which monitors the performance of the CFP. The STECF report is underpinned by analysis conducted by the European Commission’s Joint Research Centre (JRC), on the basis of data provided by, among others, the International Council for the Exploration of the Sea (ICES).

The Pew Charitable Trusts has analysed the annual European Commission and STECF reports since the entry into force of the CFP, in 2014. These analyses<sup>2</sup> and this latest document identify several potential improvements that could enhance the quality, clarity and usefulness of annual reports. This document

---

<sup>1</sup> Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy.

<sup>2</sup> The Pew Charitable Trusts submissions to the European Commission’s annual consultation on fishing opportunities (from 2014, 2015, [2016](#), [2017](#) & [2018](#)).

includes recommendations to the STECF, European Commission and JRC regarding the production of future annual reports. This is also timely with respect to the STECF expert working group meeting to explore different options to monitor the performance of the CFP from biological, economic, social, technological and environmental points of view<sup>3</sup>.

### **Recommendations for the STECF monitoring the performance of the CFP report**

The STECF report uses the information available from ICES, and other sources, to gauge how the CFP's MSY policy objectives are being delivered. Reconciling the available data with the legal requirements is a complex task, with improvements gradually being made to enhance the relevance of the report to policymakers and stakeholders. With preparations being made to improve future STECF reports, and focusing on the CFP's requirement to end overfishing in order to rebuild fish stocks<sup>4</sup>, Pew would like to make the following recommendations:

#### **1) Improve the coverage of stocks in the CFP monitoring report**

Article 2(2) of the CFP stipulates that the MSY objectives of the policy apply to "*all stocks*". Article 9(2) further specifies that "*[w]here targets relating to the maximum sustainable yield as referred to in Article 2(2) cannot be determined, owing to insufficient data, the multiannual plans shall provide for measures based on the precautionary approach, ensuring at least a comparable degree of conservation of the relevant stocks*" (emphasis added).

There is therefore a clear intention by the co-legislators to ensure that EU fisheries management restores all stocks to sustainable levels, even in the absence of sufficient information to determine MSY-based reference points. In such instances, a precautionary approach is to be applied, as defined in Article 4(1)(8), which clearly indicates that "*the absence of adequate scientific information should not justify postponing or failing to take management measures to conserve target species, associated or dependent species and non-target species and their environment*".

Pew recognises the significant amount of work that has gone into the production and development of the STECF monitoring reports so far and welcomes their continued improvement. ***The STECF should work with ICES, JRC and stakeholders to improve the coverage of reporting on progress towards achieving the CFP's MSY objectives for all stocks.*** Future reporting should also focus not only what is currently known but also better describe what is still unknown with respect to achieving MSY for all stocks.

#### **2) More clearly address data limitations with respect to measuring progress against MSY**

In a scenario of comprehensive reporting for all stocks it will be important to communicate the different levels of knowledge and degrees of confidence in the information provided for distinct categories of stocks.

We note the STECF CFP monitoring report (2018) summarises the numbers of stocks assessed by ICES, for different stock categories, in different areas in Table 1 of the report (pg. 10). ***Further to this, it would be helpful to fully list the stocks and their ICES categorisation (1-6) included in the sampling frame, as well as summarise the total number of stocks in each category and subtotals by area.*** This would complement Table 3.2 of the report (pg. 24-27), which summarises the stocks that feature in each indicator computed.

In addition to reporting on progress towards the CFP's objectives for those stocks with MSY-based assessments (ICES Category 1 and 2), as is currently the case, the STECF CFP monitoring report should also draw conclusions about the status of all other stocks with respect to achieving the MSY exploitation and

---

<sup>3</sup> STECF [EWG 18-15: CFP monitoring: expansion of indicators \(October 2018\)](#)

<sup>4</sup> Pew's effort to end European Union overfishing is currently focused on the waters of North-Western Europe. This paper therefore does not address monitoring aspects specifically relating to the Mediterranean and Black Seas.

biomass objectives. Achieving this requires further steps to identify suitable MSY-proxy reference points and STECF to identify and summarise information about the stocks where it is not possible to report against MSY or MSY-proxies.

We note that for some ICES Category 3 and 4 data-poor stocks, ICES now calculate MSY-proxy reference points. ***It should be explored further by STECF whether these MSY proxies can be used in the STECF report to provide an indication of progress toward the MSY exploitation and biomass objectives for those stocks.***

However, for some Category 3-6 stocks, for which data are more limited, we recognise that it may not be possible to identify MSY-proxy reference points or estimate with any degree of confidence the status of exploitation and biomass is in relation to them. In these cases some form of basic descriptive indicators should also be included in the STECF report, so that decision-makers and stakeholders can be informed of the number of stocks for which it is currently not possible to ascertain whether the MSY policy objectives are being met. For example, ***the STECF could aim to summarise the number of stocks where MSY or MSY-proxy reference points are 'unknown/undefined' by ICES. In addition, a summary of the number of these stocks with increasing (positive), stable, declining (negative) or unknown qualitative trends in fishing pressure and biomass could also be considered as a qualitative indicator of the overall trends in exploitation and status for those stocks without MSY information.***

While the robustness of MSY-proxy based indicators and descriptive indicators for category 3-6 stocks may be lower, such an approach should provide the co-legislators and stakeholders with at least an indication of progress being made in restoring all stocks to potential levels above those that can produce MSY, whereas the current reporting scope conveys only limited information regarding the progress made for a minority of stocks with a TAC and for which estimates of fishing mortality, biomass and biological reference points are available.

The STECF should make it clearer in the report how their indicators relate to and are relevant in measuring progress against the CFP's MSY objectives and their limitations. Until more data is provided on  $B_{MSY}$ , including proxies for stocks that have no MSY assessment, it is important that the biomass related conclusions in the STECF report are presented in a systematic way that addresses the CFP requirement and data gaps accurately and comprehensively as possible.

For example, it should be acknowledged in the STECF report that including indicators and information on *'stocks inside/outside safe biological limits'* adds context but does not address the requirement to monitor against CFP objectives. The CFP does not include a specific objective described in terms of safe biological limits and only refers to the concept in the definitions and in Article 15(8) in the context of one of the flexibility provisions to aid the implementation of the landing obligation.

Furthermore, the indicators *'trend in SSB (relative to 2003)'*, *'trend in SSB or biomass index for stocks of data category 1-3 (relative to 2003)'* and *'trend in SSB or biomass index for stocks of data category 3 (relative to 2003)'* do not satisfactorily cover the progress towards the CFP's MSY biomass objective. Whilst the analysis shows a positive trend for the North East Atlantic and this is to some degree informative of biomass recovery for the stocks covered, it does not indicate how much progress has been made towards or relative to the CFP's MSY biomass objective (i.e. above  $B_{MSY}$ ).

We also note the STECF highlighted in 2018 that there were still 40 out of 69 stocks in the Northeast Atlantic with MSY  $B_{trigger}$  set at  $B_{PA}$ <sup>5</sup>. This means that the indicators utilising the currently available values of MSY  $B_{trigger}$ , were technically still measuring progress against the  $B_{PA}$  reference point for many stocks.

---

<sup>5</sup> Page 20 - STECF-Adhoc-18-01

At least until further information becomes available to allow ICES to re-estimate the MSY  $B_{trigger}$  values to correspond to the lower bound of the biomass capable of producing the maximum sustainable yield ( $B_{MSY}$ ).

For those indicators using the MSY  $B_{trigger}$ , we feel it is important to communicate this caveat in the write-up of the findings, so that the reader can appreciate the limitations with respect to measuring progress against the biomass part of the CFP's MSY objective and to elucidate the scientific data-driven process of a transition within the MSY  $B_{trigger}$  concept – i.e. from  $B_{PA}$  (to be consistent with ICES precautionary approach framework) to an MSY  $B_{trigger}$  that corresponds with ICES definition and MSY approach.

***We would therefore recommend the STECF make clearer in the report the number and proportion of stocks where the MSY  $B_{trigger}$  used is equal to  $B_{PA}$  by ICES, as well as the implications this has for measuring and reporting progress against the biomass part of the MSY objective of the CFP.***

### **3) Improve the measuring of trends of biomass in relation to $B_{MSY}$**

We note the number and proportion of stocks above or below  $B_{MSY}$  – a key metric with regards to the MSY objective of the CFP – are not yet included in the STECF report. The STECF highlights that this is because estimates of  $B_{MSY}$  (or suitable  $B_{MSY}$  proxies) are only provided by ICES for a very few stocks. This is a key barrier preventing the monitoring and reporting of progress in relation to  $B_{MSY}$ . ***STECF should summarise and utilise, where possible, available ICES calculations of  $B_{MSY}$  ( $/B_{MSY}$  proxy) in their analysis and reporting.***

The calculation of the MSY  $B_{trigger}$  reference points (as the lower bound of  $B_{MSY}$ ) and identification of  $B_{MSY}$  proxies for some ICES Category 3 and 4 stocks illustrates that it is technically possible for ICES to provide more comprehensive information on  $B_{MSY}$ , which would allow STECF to make an improved assessment of stock status in line with the CFP's legal requirements.

STECF highlight in their report that as soon as a representative number of  $B_{MSY}$  estimates become available from ICES assessments, the proportion (and number) of stocks below or above this reference point should become part of the 'core' indicator set, together with an indicator of trends in the  $B/B_{MSY}$  ratio.

***Until this key information gap is addressed, the STECF / JRC could consider reporting using available ICES  $B_{MSY}$  estimates and/or developing their own  $B_{MSY}$  proxy estimates for use as indicators in future reports (e.g. a factor of  $B_{PA}$  ( $2*B_{PA}$ ) or alternative approaches – see Froese et al. 2016<sup>6</sup>, Poseidon Ltd. 2017<sup>7</sup>). In the short-term this would facilitate understanding of the proportion (and number) of stocks below or above plausible interim  $B_{MSY}$  benchmarks. STECF should identify any key assumptions, data gaps and limitations of such approaches.***

***We would also recommend that when a suitable number of  $B_{MSY}$  estimates become available the new indicators 'Stocks with  $F$  above/below  $F_{MSY}$  or SSB below/above MSY  $B_{trigger}$ ' should be reviewed, and if necessary upgraded to 'F above/below  $F_{MSY}$  or SSB below/above  $B_{MSY}$ ' to reflect the CFP requirement to keep stock above biomass levels capable of producing maximum sustainable yield ( $B_{MSY}$ ).***

### **4) Further comments on STECF experimental indicators**

Pew notes that whilst the indicator 'trend in  $SSB/B_{PA}$ ' is informative, and it also shows a similar pattern and trend to 'B/ $B_{2003}$ ' indicator. ***We would recommend a similar indicator of 'trend in  $SSB/MSYB_{trigger}$ ' be explored as an experimental indicator that would be closer in theory to the objective of the CFP (acknowledging limitations of current MSY  $B_{trigger}$  values – see above).***

<sup>6</sup> Froese, R., Coro, G., Kleisner, K. and Demirel, N., (2016) Revisiting safe biological limits in fisheries. Fish and Fisheries.

<sup>7</sup> Poseidon Aquatic Resources Management Ltd., "[Taking Stock: Progress Towards Ending Overfishing in the European Union](#)" (2017),

***In addition, when a suitable number of  $B_{MSY}$  ( $B_{MSY}$  proxy) estimates are available it would be a further improvement to monitor progress against the CFP MSY biomass objective with an indicator of ‘trend in  $SSB/B_{MSY}$  or  $B_{MSY}$  proxy’.***

***Furthermore, an indicator that looks at the ‘number and proportion of stocks below or above available MSY  $B_{trigger}$ ’ reference points would also be a useful indicator until a suitable number of  $B_{MSY}$  estimates are available.***

***Pew also welcome the ‘indicators of advice coverage’ and would recommend the addition of the number of stocks and associated TACs for which  $F_{MSY}$  proxy and MSY  $B_{trigger}$  proxy reference points are available (i.e. ICES categories 3 and 4 stocks), and where possible the number of stocks and associated TACs for which  $B_{MSY}$  and  $B_{MSY}$  proxy estimates are available from ICES.*** Furthermore, if STECF undertake additional efforts to generate their own intermediary  $B_{MSY}$  proxy estimates (as per our recommendation above) then the number of stocks and associated TACs where this has been done could also be summarised.

Pew acknowledges that the indicator ‘trend in recruitment (relative to 2003)’ is informative and useful. In terms of future presentation of the indicator it may be interesting for STECF to tease out trends in recruitment by area. This may hold some interesting insights.

#### **5) Additional governance indicators**

STECF should consider adding additional governance indicators to its CFP monitoring report. One such governance indicator could assess whether fishing limits proposed by the Commission and set by Council are adequate to meet the objectives of the CFP, both in terms of ending overfishing and of rebuilding stocks above levels capable of producing MSY.

Another governance indicator could address mismatches between biological stock units and management areas: area mismatches<sup>8</sup> or unknown shares of third countries often make it challenging to compare proposed TACs and the best available scientific advice. The STECF should assess how the scientific advice is translated into TAC proposals and decisions.

#### **6) Developing additional ecosystem indicators**

We note that STECF sees a need to broaden the scope of the CFP monitoring to cover additional aspects not so far dealt with. The STECF highlight the need to develop the CFP monitoring process to cover wider ecosystem and socio-economic aspects in the analysis. However, we note that Article 50 of the CFP is only focussed on reporting against the MSY objectives of the CFP. Pew would welcome new and additional ecosystem and socio-economic indicators to assess progress towards other objectives listed in Article 2 of the CFP, and these would very likely prove useful to decision-makers and stakeholders. Nevertheless, such efforts should in no way detract from STECF efforts to further improve the reporting on progress against the MSY objectives for all stocks.

#### **7) Recommendations to the European Commission**

The STECF report is underpinned by data from ICES. It is therefore essential that the European Commission include requests for the necessary data and information to adequately report on progress in meeting the CFP’s objectives in its Framework Partnership Agreement and annual grants to ICES. This includes, in particular, requesting that ICES provide estimates of  $B_{MSY}$ , or at least a median/mean value, for as many stocks as possible.

Recognising that  $B_{MSY}$  is considered by ICES a notional value around which stock size fluctuates when fishing at  $F_{MSY}$ ; and that  $B_{MSY}$  strongly depends on the interactions between the fish stock and the

---

<sup>8</sup> See for instance: [Client Earth \(2015\) Comparing TAC and ICES advice areas](#).

environment it lives in, including biological interactions between different species; then, a consideration for the EC and ICES may be a distribution of values associated with  $B_{MSY}$ , as well as a description of the status of current stock biomass with respect to appropriate intervals (e.g. 5<sup>th</sup>, 10<sup>th</sup>, 25<sup>th</sup>, ..., 75<sup>th</sup>, 90<sup>th</sup>, 95<sup>th</sup> percentiles) around a middle (e.g. median/mean) point estimate of  $B_{MSY}$ . We note that it may also be possible for ICES to describe the likely yields that would result from stock biomasses within this  $B_{MSY}$  distribution.

The main benefit of a request to ICES by the Commission could be an increase in the number of  $B_{MSY}$  estimates available for STECF to use in future CFP monitoring reports, with potentially more estimates becoming available over time if this were a regular request of ICES. Detailing  $B_{MSY}$  as a range of distribution, for example a lower (i.e.  $MSY B_{trigger}$ ), middle (e.g. median/mean) and upper interval (e.g. 95<sup>th</sup> percentile) could also help decision-makers and stakeholders better understand the variability associated with a point estimate of  $B_{MSY}$ .

The Commission should also continue to encourage ICES to conduct MSY-based assessments for as many stocks as possible, and to develop MSY proxies for the remaining stocks.

In utilising the STECF report into their annual Communication on fishing opportunities and the status of fish stocks, the Commission should strive to improve the clarity of MSY reporting. For example, the interchangeable use of the term “MSY” to refer to the different concepts of biomass, fishing mortality and yield and “in line with MSY” language risks leading to unclear statements on the feasibility of achieving the CFP’s objectives with regard to fishing mortality, or equating political decisions on TACs with actual exploitation rates by the fishing fleet. Finally, the Commission should also more clearly and accurately communicate on the need to keep exploitation rates below  $F_{MSY}$  in order to allow stocks to recover above levels capable of producing  $B_{MSY}$ .