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Quota top-ups and monitoring progress of TAC decisions towards MSY

Why top-up calculations are both crucial and challenging

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1 Introduction

The reformed Common Fisheries Policy (CFP) includes the fundamental objective to progressively restore and maintain fish stocks above biomass levels capable of producing the maximum sustainable yield (MSY; Article 2(2) of the CFP Basic Regulation¹). For the purpose of achieving this 'MSY objective', the MSY exploitation rate shall be achieved on a progressive, incremental basis by 2020 at the latest. Moreover, the CFP must apply the precautionary approach to fisheries management, and measures should be taken in accordance with the best available scientific advice (Article 3(c) of the CFP Basic Regulation).

The main instrument regulating fishing mortality in European fisheries management is the annual TAC and Quota Regulation, in which Total Allowable Catches (TACs) are set by the Council of Ministers following the publication of the European Commission's TAC proposals. In order for TACs to be in line with the CFP's objectives and requirements outlined above, they need to be proposed and set at levels which are 1) at least moving towards MSY-based exploitation rates (so that they will be achieved by 2020 at the latest), and 2) in line with the precautionary approach where data are more limited and no MSY-based stock assessment is available. To determine whether this is actually the case, it is essential to compare both the Commission's TAC proposals and the final TACs set by the Council with the scientific catch or landings advice provided by the International Council for the Exploration of the Sea (ICES).²

Every year NGOs comment on the extent to which the TAC proposals and final TACs are in line with the scientific advice, based on such comparisons. ClientEarth's analysis of TACs for the Northeast Atlantic³ has raised a range of issues which hamper this essential analysis. As we demonstrate in our briefing on monitoring progress of TAC decisions towards achieving the MSY objective,⁴ the lack of transparency regarding the data and other information used throughout the decision-making process and the final decisions themselves makes it difficult to monitor whether the proposed and set TACs are in line with the law.

The gradual introduction of the obligation to land all catches of quota stocks in the Northeast Atlantic has added a further level of complexity to this monitoring process. As this 'discard ban' is phased in throughout European waters, the purpose of TACs changes from regulating landings to regulating catches. What used to previously actually be a Total Allowable Landing limit now becomes a true Total Allowable Catch limit. In terms of assessing whether TACs are in line with scientific advice, this means that TACs now need to be compared to the advice for catches and not for landings. The main difficulty lies in the calculation of appropriate quota 'top-up' or 'uplift' amounts that are added to the advised landings to account for those catches that were previously discarded, but now have to be landed.

The Commission for the first time proposed such quota 'top-ups' for the 2016 TACs, but there was a lack of transparency concerning the data and method used in this process. This made it difficult for third parties, including NGOs, to assess whether the resulting TACs set by the Council were in line with the scientific advice, and ultimately with the CFP's requirements and

1 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 2004/585/EC

2 ICES' advice can be found on <http://www.ices.dk/community/advisory-process/Pages/Latest-Advice.aspx>

3 For the purpose of this briefing, we consider the Northeast Atlantic to include North Western Waters, South Western Waters, North Sea and Baltic Sea, as defined in Article 4(2)(c), (d), (a) and (b) of the CFP Basic Regulation, respectively.

4 ClientEarth (2016). Assessing whether TACs are being set to achieve MSY. Briefing, December 2016.

<http://www.documents.clientearth.org/library/download-info/difficulties-in-monitoring-progress-of-tac-decisions-towards-msy-and-how-to-address-them/>

particularly the MSY objective, or not. However, as the Guardian of the Treaties, the Commission must demonstrate that decisions in European fisheries management, including TAC-setting, are taken in line with the CFP's requirements and objectives.

This briefing presents an overview of the difficulties associated with the calculation of quota top-ups and their implications for monitoring. This analysis is followed by recommendations on how these difficulties could be addressed to enable effective monitoring of progress of TACs towards achieving the MSY objective and their compliance with other requirements of the CFP. In addition to the present briefing, we have also produced three other closely related briefings about overarching barriers to monitoring progress of TACs towards achieving the MSY objective and their compliance with other requirements of the CFP,⁵ about issues related to reporting in this regard,⁶ and about mismatch between TAC areas and scientific advice.⁷

2 Overview of issues related to quota top-ups

This section provides a brief overview of issues related to quota top-ups which hamper reliable TAC analyses and effective monitoring of progress towards MSY. We discuss these issues and their implications in more detail in section 0 and the associated Appendix⁸, and provide a range of recommendations on how they should be addressed in sections 3.2.1, 3.3.1, 3.4.1 and 3.5.1.

- The calculation of the appropriate quota top-up amount for a stock requires the availability of scientific advice on total catches of that stock, which incorporates landings advice and data on catches that were previously discarded. However, for many stocks such discard information is not available, and thus ICES cannot quantify the corresponding catch advice. In such cases, ICES only provides landings advice. This is problematic for all stocks that are subject to the landing obligation in some way or another as advice on discards (i.e. the difference between catch and landings advice) is needed to calculate the appropriate top-up of quota to account for fish that was previously discarded (see sections 3.1 and 3.4).
- A further complicating factor is that, until 2019 when stocks subject to catch limits will be fully covered by the landing obligation, the full top-up amount should be scaled down to the proportion of catches no longer being discarded. This is to prevent an increase in fishing mortality in fisheries or fleet segments that are not yet subject to the landing obligation for that stock. Therefore, in addition to scientific catch advice on stock-level discards, a variety of other data and information are needed to calculate appropriate quota top-ups (see section 3.1). This includes, for example, information needed to identify stocks and relevant catches that are subject to the landing obligation (see section 3.2), information on exemptions from the landing obligation (see section 3.3), and data about the contribution of different fleet segments to overall catches and discards (see section 3.4). While some of these data have been provided by STECF, there are still some gaps which prevent interested third parties from performing comprehensive TAC analyses.

⁵ *Ibid.*

⁶ ClientEarth (2016). Reporting on progress of TAC decisions and the state of fish stocks towards MSY. Briefing, December 2016.

<http://www.documents.clientearth.org/library/download-info/reporting-on-progress-of-tac-decisions-and-the-state-of-fish-stocks-towards-msy-why-it-is-important-and-how-to-improve-it/>

⁷ ClientEarth (2016). Mismatch between TACs and ICES advice. Briefing, December 2016. <http://www.documents.clientearth.org/library/download-info/comparing-total-allowable-catch-decisions-and-ices-advice-areas-pdf/>

⁸ ClientEarth (2016). Quota top-ups and monitoring progress of TAC decisions towards MSY - Appendix. Briefing Appendix, December 2016.

<http://www.documents.clientearth.org/library/download-info/quota-top-ups-and-monitoring-progress-of-tac-decisions-towards-msy-why-top-up-calculations-are-both-crucial-and-challenging-appendix/>

- The Commission's methodology for calculating quota top-up quantities is not publicly available in a sufficiently detailed format; this lack of transparency about the data and process used makes it difficult for civil society to assess whether the proposed top-up amounts are appropriate and justified (see sections 3.4 and 3.5).
- Similarly, the proposed and decided top-up percentages and quantities are only available from unofficial documents or upon request, but not published in an authoritative document (see section 3.5). The TAC Regulation itself only contains the final TACs (without indication of the included top-up percentage) so that the appropriateness of the top-up cannot be assessed without additional information from unofficial sources.

With the exception of the first issue on this list, all the above-mentioned issues are primarily rooted in a lack of transparency about the data and method used to calculate quota top-ups and the resulting top-up amounts. We discuss these aspects in more detail in the following sections and the associated Appendix.

3 Detailed evaluation of issues related to quota top-ups

3.1 Implications of the landing obligation for TAC analyses

The introduction of the landing obligation and the associated shift from regulating landings to regulating catches affect the way in which alignment of TACs with scientific advice is assessed. For this purpose, it is crucial to distinguish between those stocks that are subject to the landing obligation and those that are not. There are three possible scenarios regarding how the comparison of TACs with scientific advice may be affected by the landing obligation, depending on whether the respective stock is not at all, fully or partially subject to the landing obligation.

For stocks which are not at all subject to the landing obligation (yet), the TAC has to be compared to the landings advice as before. This is because for these stocks discarding can continue and the TAC therefore needs to be set at a level that allows for ongoing discards without increasing fishing mortality above the advised catch level. For stocks that are fully subject to the landing obligation across all fisheries, the TAC has to be compared to the total catch advice. This implies a full quota top-up to account for the fact that all of those catches which used to be discarded now have to be landed. Catches of stocks subject to the landing obligation must be landed across all fisheries by 2019 at the latest.

However, between 2016 and 2018, catches of many stocks are subject to the landing obligation only if taken by certain fleet segments, i.e. these stocks are only partially under the landing obligation (see section 3.2). Therefore, the TAC needs to be 'topped-up' by adding the amount of discards that that fleet segment, or those fleet segments, used to generate. The top-up must only cover the discard contribution of those fleet segments that are now under the landing obligation, since other fleet segments will be able to continue to discard (essentially, managed by Total Allowable Landings). Additional data on the catch and discard contribution on a fleet segment level are thus needed. In response to a request from the Commission and based on data submitted by Member States, the Scientific, Technical and Economic Committee on Fisheries (STECF) has compiled the information on fleet-segment specific discards.⁹

⁹ Scientific, Technical and Economic Committee for Fisheries (STECF) – TAC adjustments for stocks subject to the landing obligation (STECF-15-17). 2015. Publications Office of the European Union, Luxembourg, EUR 27547 EN, JRC 98384, 16 pp.

The Commission then used these data and in some cases additional information, to calculate their proposed top-up percentages and the corresponding quantities to be added to their 'landings' TAC proposal. As the Commission's methodology for calculating the TAC adjustments was originally not made publicly available, Pew Charitable Trusts submitted an Access to Information request to access this information.¹⁰ The Commission responded with an explanation of their method and spreadsheets with their calculations.¹¹ We evaluated this information in order to understand and apply the Commission's methodology, and assess the associated needs for data and their current accessibility to the public. An overview of the methodology is included in the Appendix, section 1.

As this overview and the following sections demonstrate, quota top-up calculations require a range of data in addition to ICES' scientific advice and the data compiled by STECF. This includes, amongst others, data on catch distribution between Union waters and waters under third countries' jurisdiction, where the European landing obligation does not apply. While the Commission's response to Pew's FOI request showed that such data are in principle available and used in the Commission's top-up calculations, they are currently not readily accessible to the public. Access to such data and information is crucial to enable civil society to understand and assess whether the resulting TACs - including top-up quantities - are in line with the CFP's MSY objective and other requirements. This will become increasingly relevant as the 2019 deadline for bringing all TAC-regulated stocks under the landing obligation approaches, with additional stocks likely to be added in 2017 and 2018. Top-up calculations will therefore be part of proposing TACs until 2019. This procedure needs to be transparent enough for civil society to assess the appropriateness of the proposed and set TACs, including the respective top-ups.

Our analysis showed that the necessary calculations related to top-ups, and therefore assessments of the Commission's proposed top-ups, are difficult for a variety of reasons. These are related to the issues outlined below and explained in more detail in the Appendix.

3.2 Identification of stocks subject to the landing obligation

Knowing which stocks are under the landing obligation, and to which extent, is essential for calculating an appropriate top-up amount. This is not straightforward, because the landing obligation is being phased in on a fishery and not on a stock basis (see Appendix, section 2). As outlined above, catches of a particular stock may thus be subject to the landing obligation in a particular fishery or fleet segment, whereas they can still be legally discarded in others. This is illustrated by Fig. 1 in the Appendix which summarises which catches are subject to the landing obligation depending on the type of species (demersal vs. pelagic), area (Union vs. non-Union waters), type of fishery (demersal vs. pelagic or industrial) and fleet segment they refer to.

While all catches of pelagic and industrial fisheries came under the landing obligation in 2015 (Article 15(1)(a)), catches of demersal fisheries are gradually being phased in from 2016 onwards as specified in Article 15(1)(c) and in associated discard plans.¹² Information on which catches of demersal stocks are subject to the landing obligation is currently limited to the descriptions given in the Annexes of the respective demersal discard plans. The lack of an

¹⁰ Access to Information request regarding TAC adjustments due to the landing obligation, submitted by Pew Charitable Trusts on 4 January 2016, registered on 5 January 2016 as RefGestDem No 2016/105 and 106.

¹¹ Ref. Ares(2016)542872 - 01/02/2016, European Commission response to Access to Information request submitted by Pew Charitable Trusts on 4 January 2016 regarding TAC adjustments due to the landing obligation; first response sent on 1 February 2016, second response on 9 February 2016.

¹² For example, Commission Delegated Regulation (EU) 2015/2438 of 12 October 2015 establishing a discard plan for certain demersal fisheries in north-western waters, <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1452249374326&uri=CELEX:32015R2438>

official database presenting this information in a more accessible and usable format (such as a spreadsheet that can be edited) makes the identification of stocks under the landing obligation more difficult. Moreover, additional fleet segment-specific catch statistics are needed in some cases to determine which proportion of the catches of a particular stock have to be landed. Section 2 in the Appendix provides further details on this issue.

Irrespective of these difficulties related to identifying which catches of which stocks by which fleet segment, an overarching challenge is that reliable data on unwanted catches that used to be discarded are not available for many stocks. In such cases where ICES cannot quantify total catches and only provides landings advice, the appropriate quota top-up amount and resulting TAC in line with ICES' advice cannot be determined, unless additional data on previously discarded unwanted catches are used.

3.2.1 Recommendations

- To aid evaluations of the proposed quota top-up quantities, the Commission should publish a full list of which fleet segments in a fishery are subject to the landing obligation for each stock, and which fleet segments are not. This list should include the proportion of vessels in each fishery that are subject to the landing obligation, with clear reference to the relevant advice- and TAC-units of the respective stocks. Such information is not currently available in an accessible and usable format, but presented in a fragmented way throughout the Annexes of various discard plans. This makes it difficult to determine the extent to which stocks are subject to the landing obligation, which is crucial for any analysis aimed at monitoring progress towards MSY.
- Insufficient information on discards and the resulting lack of scientific advice on catches of some stocks should be addressed by Member States through greater investment in data collection, particularly with regard to unwanted catches. This would enable ICES to provide MSY stock assessments and both landings and catch advice for as many stocks as possible, which is essential to assess to what extent TAC-setting complies with the MSY objective.

3.3 Implications of exemptions for quota top-ups

Exemptions from the landing obligation need to be accounted for in TAC-setting so that they do not increase fishing mortality. As a *de minimis* exemption allows a certain level of discarding to continue, the exemption amount has to be deducted from catch advice. As demonstrated in section 3 of the Appendix, additional data are needed in some cases in order to calculate this exemption amount. It is not clear from the Commission's methodology to what extent such data were used. This makes it difficult to determine whether the exemptions have been appropriately accounted for in the proposed or set TAC.

Sensibly, the Commission did not propose quota top-ups for stocks for which a high survival exemption has been granted, because this exemption means that discards can continue and are not limited to a specific amount. However, even for stocks with relatively high survival rates, survival of catches discarded under a high survival exemption is rarely 100%, and this 'residual mortality' has not been accounted for in the Commission's calculations. TACs for these stocks may thus allow for a fishing mortality above the advised level in cases where post-discard survival is not 100%. This hampers monitoring of TACs towards achieving the MSY objective for stocks subject to a high survival exemption, unless post-discard mortality is accounted for.

3.3.1 Recommendations

- In cases where a *de minimis* exemption does not apply to all of the fleet segment(s) subject to the landing obligation the Commission should publish all additional data it used to calculate the catch contributions of the part(s) of the fleet subject to the exemption.
- The Commission should continue to not propose quota top-ups for stocks subject to a high survival exemption, as discards under this type of exemption can continue without an upper limit. However, residual post-discard mortality of catches discarded under a high survival exemption should be quantified and accounted for in TAC-setting, so that fishing mortality is not increased.

3.4 Transparency regarding data needed for top-up calculations

As outlined above, a range of data are needed to calculate appropriate quota top-ups in line with ICES' advice and to assess the Commission's proposed top-up levels. Some of these data are publicly available, such as ICES' advice and the data compiled by STECF about catch and discard contribution of relevant fleet segments. However, the top-up calculations also require additional data which are currently not readily accessible to the public. These include:

- Information to account for spatial mismatch between advice-units, TAC-units and STECF's data on catch and discard contribution of different fleet segments (also see section 4 of our briefing on monitoring progress of TAC decisions towards MSY for more details on this topic);¹³
- Information to distinguish between landings in Union waters and those under the jurisdiction of third countries (where the EU landing obligation does not apply); and
- Additional information in terms of catch and discard contributions in fisheries where the landing obligation applies only to a part of a fleet segment that meets a certain catch composition definition, and where STECF later on updated the data it had initially provided as part of its STECF-15-17 report.¹⁴

The Commission appears to have used such information, but in several cases it is not clear what data this was based on. It is thus difficult to judge if the resulting quota top-up quantities are appropriate as the underlying data cannot be assessed. Please refer to the Appendix, section 4, for more details on transparency concerns regarding data needed for top-up calculations.

3.4.1 Recommendations

The Commission should publish all additional data and information it used for calculating top-ups or at least indicate where these data can be retrieved from, including:

- Data for splitting advice into subareas for matching purposes
- Data for splitting advice into Union- and third countries' waters

¹³ ClientEarth (2016). Assessing whether TACs are being set to achieve MSY. See footnote 4 for full reference details.

¹⁴ Scientific, Technical and Economic Committee for Fisheries (STECF) – TAC adjustments for stocks subject to the landing obligation (STECF-15-17). 2015. Publications Office of the European Union, Luxembourg, EUR 27547 EN, JRC 98384, 16 pp.

- Data for calculating catch and discard contributions of the part(s) of the fleet subject to the landing obligation in cases where this is also defined by catch composition; a list of Member State vessels, preferably indicating which catches per vessel are subject to the landing obligation
- Data for calculating the catch contributions of the part(s) of the fleet subject to an exemption (in cases where the exemption does not apply to all of the fleet segment(s) subject to the landing obligation)
- Updates to STECF's data on catch and discard contribution.

3.5 Transparency regarding top-up calculation methodology and results

Once the Commission has completed its top-up calculations, their utilised methodology, results and final proposal should be made publicly available. This information is essential to assess both 1) whether the Commission's proposal is in line with scientific advice (particularly MSY-based advice) and 2) whether the Council then followed this proposal or not. Such an evaluation in turn forms the basis of monitoring progress in TAC-setting towards achieving the MSY objective. However, we highlight a number of transparency-related issues in this regard:

- The Commission's proposed top-up percentages and quantities were not published in an official document and neither was the Commission's total TAC proposal for the majority of demersal stocks covered by the landing obligation.¹⁵ This information was only partially included in a provisional table within the Outcome of the Council meeting document,¹⁶ and this document only lists those quota top-ups which were actually applied, but leaves out cases where a top-up was considered but then not proposed or granted. Such information is neither complete nor fully reliable.
- The Commission's methodology for calculating the top-up quantities was only provided upon request, with a delay of almost two months from December Council. In line with transparency requirements, the documents and spreadsheets provided in response to Pew's FOI request should be made publicly available.
- While we welcome the Commission's attempt to explain its methodology based on a simplified example, more detailed guidance on how the more complex cases were addressed is needed to allow stakeholders to better understand the process.

Improved transparency on the relevant methodology, data and results is necessary for the Commission to demonstrate it is complying with the requirements of the CFP Basic Regulation. This would also enable civil society to better monitor whether the proposed top-up quantities and resulting TACs are in line with the CFP's sustainability requirements and also make it easier for stakeholders to support the Commission where their proposal demonstrably followed scientific advice - and to challenge decisions which lead to unsustainable TACs.

3.5.1 Recommendations

- The Commission's methodology for proposing quota 'top-ups' should be published with its annual TAC proposal. It should include a description of how the most complex

¹⁵ The Commission's 2016 TAC proposal for the Northeast Atlantic only contained '*pm*' (= *pro memoria*, i.e. still subject to further analyses or negotiations) entries instead of concrete values for 28 out of 33 TACs referring to demersal stocks subject to the landing obligation in certain fisheries.
¹⁶ Council of the European Union (2015). Outcome of the Council meeting. 3437th Council meeting, Agriculture and Fisheries. 15276/15. Brussels, 14 and 15 December 2015. http://www.consilium.europa.eu/en/meetings/agrifish/2015/12/st15276_en15_pdf/

scenario was dealt with, including explicit reference to what additional data were needed and used in the calculations.

- The proposed and granted top-up percentages and quantities are currently only implicitly (and incompletely) included in the Council's Outcome of the Council meeting document. Instead, they should be directly published in an official document and/or a spreadsheet that can be edited.
- As the 2019 deadline for bringing all catches of TAC-regulated stocks under the landing obligation approaches, quota top-ups will become 'permanent' and could have lasting implications regarding the level of exploitation stocks are subject to the landing obligation. It is thus important to make the process and data used more transparent to allow for an effective assessment of progress of the resulting TACs towards achieving the MSY objective, which in itself has a deadline of 2020. We therefore recommend that all relevant data and information as discussed throughout this briefing should be provided in a more accessible and usable format (such as spreadsheets that can be edited) to facilitate analyses. This could be achieved by providing official and up-to-date spreadsheets with the respective information.

4 Conclusion

Monitoring progress of TAC decisions towards achieving the MSY objective and their compliance with other requirements of the CFP is a vital part of ensuring that European fisheries management becomes more sustainable and follows the law. The phased introduction of the landing obligation poses a number of challenges for the calculation of appropriate TACs in line with the scientific catch advice provided by ICES. These issues are largely rooted in the current lack of transparency about the data and methodology used by the Commission to determine quota 'top-ups' or 'uplift' to account for those catches that were previously discarded but now have to be landed. The information available to stakeholders on top-up amounts proposed by the Commission and adopted by the Council is also currently insufficient.

These shortcomings make it difficult for civil society to assess whether the proposed and set TACs, including the respective top-ups, are in line with the scientific advice and, crucially, with the requirements and objectives of the CFP. This briefing has highlighted the wide range of issues related to quota top-ups which hamper comprehensive and reliable TAC analyses, and presented specific recommendations on how they should be addressed at different stages of the decision-making process. These recommendations can be summarised as the need for greater transparency 1) about all data and information used to calculate top-ups, 2) about the decision-making process itself (including the Commission's methodology for calculating quota top-ups and 3) about the resulting TAC proposals and decisions. Providing relevant data and information to stakeholders in a more user-friendly format (such as spreadsheets that can be edited, as opposed to PDF files) would also play an important role in this regard.

Furthermore, improved transparency would bolster the Commission's credibility and empower civil society to support the Commission and the Council where they propose and set TACs in line with the law, and to hold them to account where they fail to do so. Finally, it will help the Commission to fulfil its fundamental duty of demonstrating that decisions in European fisheries management, including TAC-setting, are taken in line with the CFP's requirements and objectives.

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