

Appendix

This Appendix contains further background information to our briefing on challenges posed by quota top-ups for monitoring progress of TAC decisions towards MSY.¹ This includes information on the European Commission's methodology for calculating quota top-ups (section 1), the identification of stocks subject to the landing obligation (section 2), the incorporation of exemptions (section 3) and transparency regarding data needed for top-up calculations (section 4).

1 Overview of the Commission's methodology for calculating quota top-ups

The Commission used the following methodology, taking into account information and data provided by the International Council for the Exploration of the Sea (ICES) and the Scientific, Technical and Economic Committee for Fisheries (STECF), to calculate the quota top-ups for 2016, the first year the demersal landing obligation came into force. The description of this methodology below is based on information submitted by the Commission² in response to Pew's Access to Information request of 4 January 2016.³

The starting point for calculating a quota top-up is the advice provided by ICES on landings and total catches (including discards) of a stock.⁴ Note that ICES does not provide explicit discard advice, but this information is implicitly included, as the catch advice is essentially the sum of the advised landings and the discards.

First of all, ICES' advice needs to be split into different sub-areas in cases where separate TACs are set for different parts of the advice area. The same applies to cases for which STECF provided data separately, for different parts of the advice area, about the catch and discard contribution of the vessels subject to the landing obligation, i.e. the proportion of overall catches and discards of the respective stock accounted for by these vessels. In some cases ICES' advice includes areas subject to third countries' jurisdiction as its advice is provided on a stock-basis irrespective of jurisdiction. The part of the advice referring to such areas needs to be excluded as the landing obligation (and therefore any quota top-up) does not apply in third countries' waters (Article 15(1) of the CFP Basic Regulation). The estimated overall discards (for each of the sub-areas that ICES' advice has been split into as outlined above, where applicable) are then calculated as the difference between the remaining catch advice and the corresponding landings advice. The estimated discards for the fleet segments that are under the landing obligation will in the end be the quota top-up, after any potential exemptions have been accounted for.

At this point the fleet segment-specific data on catch and discard contribution provided by STECF (i.e. the proportion of overall catches and discards of a stock accounted for by the respective fleet segment) come into play.⁵ Based on the respective percentages, the advised

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

¹ ClientEarth (2016). Quota top-ups and monitoring progress of TAC decisions towards MSY. Briefing, December 2016.

² 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. 3 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.

⁴ ICES' advice can be found on http://www.ices.dk/community/advisory-process/Pages/Latest-Advice.aspx

⁵ 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.

catches and estimated discards are calculated for each fleet segment. In several cases the fleet segments subject to the landing obligation are defined not only by gear type but also by catch composition.⁶ As STECF's data are only based on the different gear types, additional data are needed about catches and discards of the vessels that meet the catch composition definition. These are used to calculate the proportion of overall catches and discards accounted for by vessels under the landing obligation. In combination with ICES' catch and discard advice this yields the advised catches and discards for 1) the part of the fleet subject to the landing obligation and 2) the remainder.

To calculate the final quota top-up amount, *de minimis* exemptions need to be accounted for (see section 3). This is done by deducting the amount of catches that can be discarded under the exemption from the theoretical 'full' top-up amount, based on estimated discards for that part of the fleet that is under the landing obligation. The final proposed TAC in line with ICES' advice is the sum of the landings advice for Union waters, the respective top-up amount (after exemptions have been accounted for) and the landings advice for third countries' waters (if applicable).

2 Identification of stocks subject to the landing obligation

Article 15(1) of the CFP Basic Regulation outlines a timetable for the progressive implementation of the landing obligation according to fishery type (e.g. small pelagic, large pelagic) and for '*species which define fisheries*'. Although Article 15(1) provides an overall framework for demersal stocks (e.g. the species which define each 'fishery' shall be subject to the landing obligation from 1 January 2016, and all other species by 1 January 2019), the decision of which fisheries will be required to land which species in the lead-up to 2019 is left to regional decision-makers. The specific fleet segments subject to the landing obligation for particular stocks, as well as exemptions, are defined (based on gear type and/or catch composition) in regionally-agreed discard plans adopted by the Commission as delegated acts.⁷ Until 2019, whether catches of a stock have to be landed or not depends on the fisheries they occur in and whether they are considered to 'define' those fisheries, i.e. species are not being brought under the landing obligation as a whole across all fisheries. Due to the difficulty in defining fisheries as part of this fisheries- rather than species-based approach of phasing in the landing obligation, it is not always easy to identify which catches have to be landed on a stock-level.

Figure 1, below, 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. For example, all catches of pelagic and industrial fisheries (Article 15(1)(a)) came under the landing obligation in 2015, but catches of pelagic species in demersal fisheries do not (yet) have to be landed. Therefore, TACs for pelagic species should be based on the full catch advice only if there are demonstrably no discards in demersal fisheries. Otherwise these discards must be deducted from the overall catch advice to ensure the resulting TAC does not allow for an increase in fishing mortality above the advised level. Assessing the extent to which pelagic species are also caught in demersal fisheries for this purpose requires additional in-depth analyses of catch statistics, and there is no evidence that this is being incorporated.

⁶ For example, according to Annex (c) of the demersal discard plan for the north-western waters for 2016 (Commission Delegated Regulation (EU) 2015/2438) the landing obligation for Norway lobster applies only to vessels using trawls, seines, pots, traps and creels 'where the total landings per vessel of all species in 2013 and 2014 consist of more than 30% of Norway lobster'.

⁷ For example in 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

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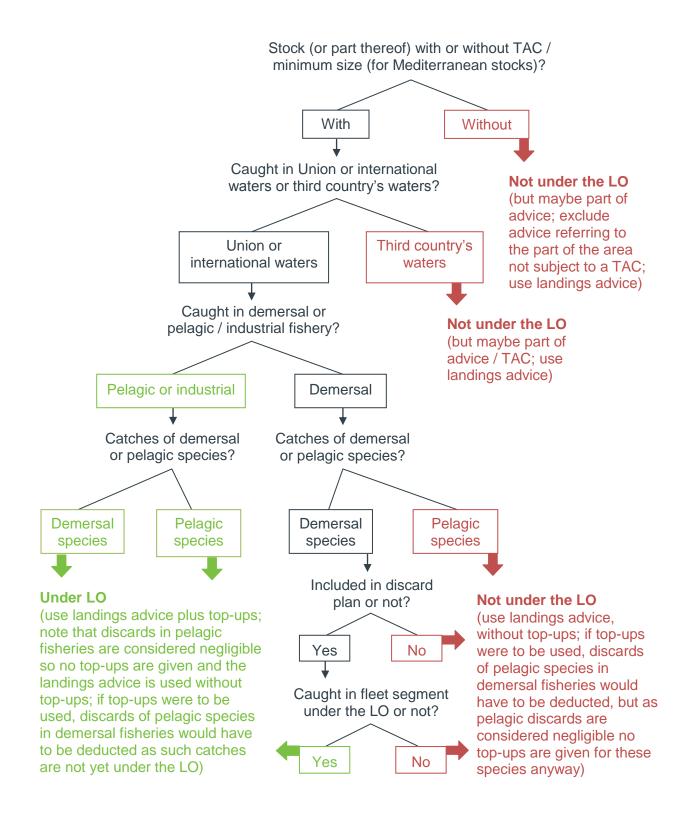


Fig. 1: Decision tree about which catches are subject to the landing obligation (LO), depending on area (Union or international versus third country's waters), fishery (pelagic or industrial versus demersal) and type of species (pelagic versus demersal). This diagram also indicates whether top-ups are used or not, and which part of the scientific advice (i.e. landings advice, catch advice or landings advice plus top-ups) TACs should be compared to. The situation is even more complex with regard to demersal fisheries. Due to the phasing approach no demersal stock is fully under the landing obligation yet, and won't be until all catches in all fisheries are included in the respective discard plan (or until 2019). Therefore, TACs for all demersal stocks (except those that are fully covered in the Baltic Sea) need to be adjusted, depending on the catch and discard contribution of fleet segments not (yet) under the landing obligation for the respective stock. Moreover, all catches of demersal species in pelagic fisheries are already under the landing obligation. Discards of demersal species in pelagic fisheries would therefore theoretically also need to be accounted for in TAC-setting. While discards of demersal species in pelagic fisheries appear to be widely considered negligible, additional catch data analyses would be needed to assess the validity of this assumption.

3 Incorporation of exemptions

Exemptions from the landing obligation have to be accounted for in TAC setting. It is therefore essential to determine which proportion of the overall catches the exemption applies to. In some cases this is difficult, since exemptions can apply to just some of the fleet segments that are subject to the landing obligation. Therefore, additional data about the contribution of 'exempt' fleet segments to total catches needs to be known in order to calculate the appropriate exemption amount. Such information does not appear to be readily available, and therefore new, additional analyses of catch statistics by fleet segment seem to be necessary to determine the appropriate amount. Based on the Commission's description of its methodology and their calculations it is still not clear to what extent such additional data were used and where they came from. It is therefore difficult to judge, in some cases, whether the calculated exemption quantities are appropriate.

High survival exemptions introduce another complication: post-discard mortality. High survival exemptions allow unlimited discarding of catches of a particular stock in a particular fishery, based on evidence of high survival. The Commission therefore decided not to propose top-ups for stock- and fishery-combinations subject to a high survival exemption as all discards can continue and thus do not need to be compensated for.

However, post-discard survival is rarely 100%; therefore all discards that do not survive would need to be accounted for in TAC-setting (like *de minimis* exemptions) in order to not increase fishing mortality above the advised level. This, in turn, would require additional information about a) the quantities discarded under a high survival exemption and b) the proportion and quantity of such discards which do not actually survive. Such information is not readily available and the Commission does not account for dead discards under high survival exemptions when proposing TACs. Any resulting TACs may therefore still allow for overfishing when not all discards survive. It is therefore impossible to judge whether TACs based on such proposals are in line with the CFP's MSY objective, unless additional data are incorporated to quantify post-discard mortality.

4 Transparency regarding data needed for top-up calculations

Sections 3.1, 3.2 and 3.3 of the main report and section 1 of this Appendix explain why a lot of data based on fleet segment-specific catch statistics are needed to calculate quota top-ups appropriately. This section deals primarily with transparency concerns in relation to the



accessibility of these data, providing further details on the transparency concerns discussed in section 3.4 of the main report.

In summary, the data needed to calculate an appropriate quota top-up in line with ICES' advice, and to assess the Commission's proposed top-up levels, include the following:

- 1. ICES' catch and landings advice: this is publicly available on the ICES website.⁸
- 2. Data for splitting advice into sub-units, 1) for matching the advice with TAC-units and/or with the catch and discard contribution information provided by STECF, and 2) for distinguishing between Union and third countries' waters: for this, the Commission used additional data on the percent landings contribution of the sub-areas that the advice needs to be split into. It is not clear from the information provided by the Commission in response to Pew's Access to Information request what these percentages are based on.
- 3. Catch and discard contribution data of fleet segments that are subject to the landing obligation and those that are not: these data were compiled by STECF for the different gear types and are available in the Annex of the STECF-15-17 report.⁹ However, the documents provided by the Commission in response to Pew's Access to Information request suggest that some of these values were updated later on. These updates do not appear to have been made publicly available yet.
- 4. Data on the catch and discard contribution of vessels that meet a particular catch composition threshold, in cases where such a threshold is part of the definition of fleet segments subject to the landing obligation: the Commission used such data, but it is unclear from the documents submitted in response to Pew's FOI request what these are based on.

This demonstrates that a large part of the necessary information used by the Commission to calculate quota top-ups is not readily available to interested third parties; moreover, in some cases it is not even clear what data the respective information is based on. Overall, a significant amount of data is needed to calculate top-up quantities in line with sustainable catch levels. While some of these are easily accessible, various additional data are currently either not published in an accessible and usable format, or not demonstrably considered in the Commission's top-up calculation methodology. These concerns and transparency issues should be remedied in subsequent Commission proposals and TAC decisions.

⁸ ICES' advice can be found on http://www.ices.dk/community/advisory-process/Pages/Latest-Advice.aspx

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.