# ANALYSIS OF TOTAL ALLOWABLE CATCHES IN THE NORTH-EAST ATLANTIC FOR 2017 

## 7 March 2017

## Summary

This document analyses the decisions made by the Council of EU fisheries ministers to set Total Allowable Catches (TACs) for 2017, and the extent to which the decisions end overfishing in line with scientific advice.

Around half of the TACs proposed by the European Commission ( $27^{\text {th }}$ October, 2016) were in line with the scientific advice. Even if adopted by Council, the Commission proposal would not have been sufficient to end overfishing. Yet, fisheries ministers subsequently agreed TACs at the Council (13 ${ }^{\text {th }}$ and $14^{\text {th }}$ December, 2016) that were even further away from scientific advice.

The decisions on TACs for 2017 again demonstrate the Council's reluctance to implement the CFP. In summary, 54 per cent of TACs set by Council for European stocks in the North-East Atlantic region (60 of 111) exceeded the scientific advice on fishing limits, a marginal reduction from the 57 per cent of the same TACs in 2016 (63 of 111).

There has been no real progress in terms of the percentage of TACs set at or below $\mathrm{F}_{\text {MSY }}$ advice. Of the TACs where scientific advice on MSY exploitation rates was available, 55 per cent of the TACs (33 of 60) set by Council were in line with scientific advice for 2017, compared to 54 per cent of the TACs (29 of 54) set in 2016. Neither the Commission nor any member states publicly presented clear evidence of socio-economic impacts, which the CFP requires to justify to further delay reaching MSY exploitation rates. This is not the "progressive, incremental" change required by Article 2(2) of the CFP.

There are important transparency issues that make it difficult to analyse the extent to which the Council set fishing limits in line with the scientific advice. These include: late, insufficient and sometimes contradictory information on TAC 'adjustments' to account for the landing obligation (LO); and incomplete information on how the Commission transforms ICES advice on catch limits into TACs (i.e. stock and TAC area mismatch).

To determine if the TACs adjusted to account for the LO were in line with scientific advice, it was necessary to make assumptions about the level of 'adjustments'. The analysis nevertheless indicates that for some TACs subject to the LO, fishing opportunities exceed the scientifically advised levels and this might also be the case for some other TACs that are partially subject to the LO.

Furthermore, decisions on specific TAC provisions undermine the sustainability of several stocks in 2017. 'Bycatch provision' footnotes for a number of pelagic TACs risk increasing the fishing mortality on the relevant non-target species (i.e. dab, whiting, haddock, mackerel, boarfish) above the scientifically advised levels of catches for those stocks.

Finally, the Council agreed to designate picked dogfish as a prohibited species with a special catch allowance ${ }^{1}$ for vessels engaged in national 'bycatch avoidance programmes'. Designating stocks with zero TAC advice as prohibited species will not protect them from overfishing, and in itself provides little incentive for fishers to improve the selectivity of their fishing practices. Furthermore, Pew is concerned that without adequate monitoring and reporting, national 'bycatch avoidance programmes' may be exploited as a means to legitimise landings instead of actual minimizing bycatch, risking increasing fishing mortality on the stock.

[^0]
## 1. Background

The CFP which entered into force on $1^{\text {st }}$ January 2014 includes a requirement to end overfishing, with legally binding targets and deadlines. The CFP establishes in Article 2(2) that "in order to achieve the objective of progressively restoring and maintaining populations of fish stocks above biomass levels capable of producing the maximum sustainable yield, the maximum sustainable yield exploitation rate shall be achieved by 2015 where possible and, on a progressive, incremental basis at the latest by 2020 for all stocks".
At the Fisheries Council on $13^{\text {th }}$ and $14^{\text {th }}$ December 2016, EU fisheries ministers decided upon TACs for most fish stocks in the North-East Atlantic and adjacent waters for 2017. This should have resulted in fisheries ministers agreeing to TACs that end overfishing, because the CFP allows for postponing the 2015 deadline only in exceptional cases, when meeting it "would seriously jeopardise the social and economic sustainability of the fishing fleets involved" (CFP Recital 7).

## 2. European Commission 2017 TAC proposal for the Atlantic

Under Article 43(3) of the Treaty of the functioning of the European Union, fishing opportunities are proposed by the Commission and agreed by the Council by qualified majority vote. On $27^{\text {th }}$ October 2016 the European Commission proposed ${ }^{2}$ sixty-nine TACs for fish stocks in northern waters ${ }^{3}$ and southern waters ${ }^{4}$ of the North-East Atlantic, which are not subject to negotiation with third countries or awaiting further scientific advice.

Around half of the proposed TACs (35 of 69) were in line with the scientific advice on limits provided by the International Council for the Exploration of the Sea (ICES). This is similar to 2015, when the Commission proposed 33 of 66 in line with the ICES advice. For the majority of those TACs for which advice on maximum sustainable yield (MSY) exploitation rates was available, the Commission initially proposed fishing limits in line with the scientific advice provided by ICES (23 of 29) ${ }^{5}$. The Commission changed some of these TAC proposals through 'non-papers' before the December Council, ultimately proposing more TACs (32 of 39$)^{6}$ in line with the ICES MSY advice ${ }^{7}$.

For a further fifty-three TACs, no proposal was published by the Commission on $27^{\text {th }}$ October. These were described as "pm" (pro memoria) because they are shared with third countries and consultations was yet to conclude, or because the scientific advice was not received at the time the proposal was created, or because the Commission's evaluation of that advice was still ongoing ${ }^{8}$.

In summary, the Commission's proposal for fishing limits in 2017 already proposed numerous TACs exceeding scientific advice, including for several stocks with MSY assessment. For a detailed analysis, see Pew's response to the Commission's proposal.

[^1]
## 3. Fisheries Council 2017 TAC decisions

Based on the Commission's proposal, EU fisheries ministers decided at their Council meeting on $13^{\text {th }}$ and $14^{\text {th }}$ December 2016 on 144 TACs in the North-East Atlantic ${ }^{9}$, including stocks that are subject to negotiations with third parties. 121 of the 144 TACs are within the scope of this analysis ${ }^{10}$. For almost all-111 $1^{11}$ out of the 121-scientific advice on catch limits was available.

The 111 TACs for which scientific advice was available fall into two categories:

- Fifty-one TACs (46 per cent) were set in line with scientific advice, including limits for haddock in areas $7 \mathrm{~b}-\mathrm{k}, 8,9$ and 10; hake in areas 2 a and 4 ; and, Norway lobster in areas 8abde.
- Sixty TACs (54 per cent) were set above scientific advice, and they exceeded on average the advice by 79 per cent (compared to 75 per cent in 2016) ${ }^{12}$.
Some decisions significantly diverge from the scientific advice:
- For some TACs, the fishing limit set is significantly higher than the scientific advice: whiting in area 3a (678 per cent), sprat \& associated bycatches in area 3a (241 per cent), cod in the Kattegat (307 per cent), cod in areas 6b, 5b, 12 and 14 ( 335 per cent), and pollack in area 7 (198 per cent).
- In nine instances, TACs were set despite the advice being for no fishing: herring in areas 5b, 6b and 6 a (North); herring in areas 6 a (South) and 7 bc ; cod in area 7 a ; sole in area 7 a ; northern prawn in areas $2 a$ and 4, picked dogfish in areas 1,5-8, 12 and 14; and, three TACs subject to a joint statement by the Council and the Commission agreeing to maintain TACs unchanged unless the perception of the status of these stocks changes significantly ("statement stocks") ${ }^{13}$ : whiting in area 7; blue ling in area 3; and, blue ling in areas $2 a$ and 4.
- Sixteen TACs for "statement stocks" had scientific advice to reduce catches. Fifteen of these TACs were maintained at the same levels and only one TAC (plaice in areas 7 hjk ) was reduced by 5 per cent instead of the 36 per cent advised by ICES.
Sixty out of the 111 TACs had specific advice on fishing rates that correspond to maximum sustainable yield ( $\mathrm{F}_{\text {MSY }}$ ), and fall into two categories:
- Thirty-three ${ }^{14}$ TACs ( 55 per cent of 60 TACs) were set by the Council not exceeding the $\mathrm{F}_{\text {MSY }}$ advice. These include TACs for cod in area 6a; haddock in areas 7b-k, 8, 9 and 10; Norway lobster in area 3a (EU waters of Subdivisions 22-32); plaice in area 7d; common sole in area 7e; and, several herring TACs. Twelve of these TACs had been set above the $F_{\text {MSY }}$ advice in 2016.
- Twenty-seven ${ }^{15}$ TACs ( 45 per cent of 60 TACs) were set by the Council above the $F_{\text {MSY }}$ advice. These include TACs for cod in areas 7bc,e-k, 8, 9 and 10; plaice in area 7a; haddock in area 7a; whiting in areas 2 a and 4 ; cod in areas 2 a and 4 ; hake in areas $8 \mathrm{c}, 9,10$ and CECAF 34.1.1; horse mackerel in area 8 c ; horse mackerel in areas $2 \mathrm{a}, 4 \mathrm{a}, 5 \mathrm{~b}, 6,7 \mathrm{a}-\mathrm{c}, 7 \mathrm{e}-\mathrm{k}, 8 \mathrm{abde}, 12$ and 14 . Four TACs had advice for zero catches in 2017. Ten ${ }^{16}$ of these twenty-seven TACs had been set not exceeding the $\mathrm{F}_{\text {MSY }}$ advice in 2016.

[^2]In summary, 54 per cent of TACs set by Council for European stocks in the North-East Atlantic region (60 of 111) exceeded the scientific advice on fishing limits, a marginal reduction from the 57 per cent of the same TACs in 2016 ( 63 of 111). However, the TACs set above the scientific advice exceeded it on average by 79 per cent compared to 75 per cent in 2016.

Of the TACs for European stocks in the North-East Atlantic region where scientific advice on MSY exploitation rates was available, 55 per cent of the TACs ( 33 of 60 ) set by Council were in line with scientific advice for 2017, compared to 54 per cent of the TAC ( 29 of 54) set in 2016 . Neither the Commission nor any member state publicly presented clear evidence of socio-economic impacts, which the CFP requires to justify delays in reaching MSY ${ }^{17}$. This is not the "progressive, incremental" change required by the CFP.

## 4. Transparency issues hindering full accountability on TAC setting

Pew notes a number of important transparency issues that impede an assessment of the extent to which Council sets fishing limits in line with the scientific advice.

## a. TAC 'adjustments' to account for the landing obligation

The Landing Obligation (LO) is being implemented gradually between 2015 and 2019. During 2017 the LO will continue to apply to all pelagic fisheries, and to additional components of specific demersal fisheries. This means that for some TACs (e.g. twenty-seven pelagic TACs) the LO covers all fisheries but for some TACs the LO covers only some fisheries. The information provided by the Commission and Council on TAC 'adjustments' is insufficient to comprehensively analyse whether these adjustments and associated TACs were set in line with scientific advice. In particular for TACs partially subject to the LO further information would be required to assess if the TACs (including adjustment) are above scientific advice. Pew's assessment of whether TACs are set in line with scientific advice is made on the basis of data obtained through freedom of information requests made after the Council ${ }^{18}$.

## b. Stock and TAC area mismatch

For many stocks there are mismatches between the geographic areas used by ICES in its stock assessments and the areas covered by a TAC ${ }^{19}$. Unfortunately, this means that it is not always possible for stakeholders to ascertain to what extent scientific advice has been followed for some TACs. Pew would welcome improved transparency on how the Commission arrives at the proposed TAC from the scientific advice, for example, how scientific advice on catches for stocks are apportioned to TAC areas, and how total catch advice is respected in relation to total EU and third country TACs.

## c. Combined TACs for skates \& rays

Pew notes that the Council sets fishing limits for skates and rays as combined TACs. This impedes the effective setting of fishing mortality limits on individual stocks. As a result, TACs for skates and rays (set as the sum of the scientifically advised catch limits for multiple species/stocks) could far exceed the catch advice for each individual stock, and most importantly for the most sensitive species/stocks covered by the TAC. The Commission has acknowledged the problem and is looking for solutions. Pew would welcome progress to minimise the risks of overfishing certain skates and rays.

[^3]
## 5. Specific provisions undermining sustainable fishing limits

Pew is concerned about decisions made during the Fisheries Council which could undermine the sustainability of several stocks in 2017.

## a. Landing obligation 'adjustments' and scientific advice

As stated in section 4, it is not possible to fully analyse the extent to which TACs set by Council and subject to the Landing Obligation (LO) exceed the scientific advice. However, the following analysis indicates that for some TACs subject to the LO, fishing opportunities exceed the scientifically advised levels and that for some other TACs partially subject to the LO, this might also be the case.

There are forty-three TACs for demersal stocks under the LO in 2017. Of these:

- Ten demersal TACs are subject to the LO, covering all the relevant fisheries, and were not partially adjusted to account for the LO. It is therefore possible to assess whether these TACs are in line with scientific advice on total catches:
- Nine TACs were set in line with scientific advice on total catches.
- One TAC exceeded scientific advice on total catches: Northern prawn in areas 2a and 4.
- Twenty-two demersal TACs are subject to the LO, but covering only some fisheries, and were partially adjusted to account for the LO. Based on the information available it is not possible to assess whether these adjustments are in line with scientific advice. Therefore it is only possible to analyse TACs after the adjustments ${ }^{20}$ are removed:
- Ten TACs were set in line with scientific advice on landings before the adjustment was applied.
- Twelve TACs exceeded scientific advice on landings before the adjustment was applied, on average by 44 per cent.
- Eleven demersal TACs are subject to the LO, but covering only some fisheries, and did not include adjustments:
- Three TACs were set in line with scientific advice on total landings: hake in area 3a, hake in areas 2 a and 4, and anglerfish in areas 8c, 9, 10 and CECAF 34.1.1.
- Two TACs exceeded scientific advice on landings: anglerfish in areas 8abde and plaice in areas $8 \mathrm{c}, 9,10$ and CECAF 34.1.1 ${ }^{21}$.
- Four TACs exceed scientific advice on catches since discards are unknown, and are part of "statement stocks": common sole in areas 7bc, common sole in areas 7hjk, plaice in areas 8, 9, 10 and CECAF 34.1.1 and sole in 8cde, , 10 and CECAF 34.1.1.
- Two TACs (plaice in areas 5b, 6, 12 and 14 and sole in areas 5b, 6, 12 and 14) did not have any scientific advice.


## b. TAC footnotes - 'bycatch provisions'

Pew notes several changes to the 'bycatch provisions' footnotes for the following TACs: sandeel in areas 3 a , $2 \mathrm{a} \& 4^{22}$, sprat in areas $3 \mathrm{a}^{23}$, sprat in areas $2 \mathrm{a} \& 4^{24}$, Norway pout in areas 3 a and $2 \mathrm{a} \& 4^{25}$, and horse mackerel in areas $2 a-14$ and $4 b c \& 7 d^{26}$. These footnotes allow a specified quantity (in percentage) of non-target species to be caught in pursuit of the target TACs, but those catches are not deducted from the target or non-target species TACs.

Furthermore, the Council introduced a major change in the text. Unlike in previous years, the linkage to the inter-species flexibility provision of the LO (Article 15(8) of Regulation (EU) No 1380/2013) has been removed. This means that the use of these provisions do not require the associated non-target

[^4]stocks to be within safe biological limits (i.e. $\mathrm{F}<\mathrm{F}_{\text {lim }}$ and $\mathrm{B}>\mathrm{B}_{\mathrm{lim}}$, as defined in the CFP), circumventing a basic regulation requirement. Additionally, the number of non-target species included within the scope of these provisions has gradually increased since 2015. Of the TACs with bycatch provisions, five non-target species in total are identified (dab, whiting, haddock, mackerel, and boarfish). Out of these species only two stocks (North Sea whiting and North East Atlantic mackerel) are considered to be within safe biological limits, however, fishing mortality levels for both of these stocks are above $\mathrm{F}_{\text {MSY }}$.

Pew is highly concerned that there is no provision to deduct these catches from the TACs set for the non-target species, as this entails considerable potential to increase fishing mortality on those nontarget stocks above scientifically advised levels, whilst pursuing the target fisheries of sandeel, sprat, Norway pout and horse mackerel. This presents a particular risk for some demersal non-target species (e.g. whiting) where the TAC for the target species (e.g. horse mackerel) is much larger than the non-target species TAC. The two or five per cent bycatch allowance per TAC may individually, or cumulatively between TACs with bycatch provisions, translate to be a large tonnage of non-target species catches, and therefore risks significantly exceeding the scientifically advised catch limits for those stocks. Moreover, this is especially a concern for the non-target stocks which already are outside safe biological limits and also undermines the objective of setting fishing rates that correspond to MSY for the respective non-target stocks.

In addition there is no requirement to deduct non-target catches from the quota of the target species, which again would circumvent the provisions made in Article 15(8) of the CFP.

Pew recommends that the European Commission seek a scientific assessment of the impacts of the 'bycatch provisions' on the sustainability of the non-target stocks and assess the footnotes' overarching compatibility with setting fishing limits not exceeding the rate that can produce MSY for those stocks as required by the CFP.

## c. Picked dogfish 'prohibited' status and 'bycatch avoidance programme' TAC

The Council agreed to designate picked dogfish (spurdog) as a prohibited species but with a special exception (derogation) for landings of dead picked dogfish from areas 1, 5-8, 12 and 14 by vessels engaged in member state 'bycatch avoidance programmes'. These are not defined in the regulation. This derogation allows landings of no more than two tonnes per vessel per month and not exceeding a Union TAC of 270 tonnes divided by member states according to relative stability.

In previous years the three picked dogfish TACs were set at zero in accordance with ICES advice for no targeted fisheries and minimal bycatch. Pew acknowledges that zero TAC species are likely 'choke species' under the LO but would like to highlight that designating stocks with zero TAC advice as prohibited species will not protect them from overfishing, as bycatch and discarding of dead fish will continue, with little incentive for fishers to improve the selectivity of their fishing practices to reduce fishing mortality on the stock. In the first instance Pew would welcome further actions to develop avoidance and selectivity measures to protect species for which the scientific advice is zero catch. With regards to the derogated TAC allowing the landing of picked dogfish from areas 1, 5-8, 12 and 14 , Pew is concerned that without adequate monitoring and reporting, member states 'bycatch avoidance programmes' may be exploited as a means to legitimise landings instead of actual minimizing bycatch, allow for continued discards and risk increasing fishing mortality on the stock.

Pew notes that The Scientific, Technical and Economic Committee for Fisheries (STECF) could not fully evaluate the effectiveness of the UK's proposed bycatch avoidance project, which initiated the discussion that led to this provision. Furthermore STECF noted "that at present, spurdog is not included in any discard plans and because vessels that do not opt into the UK approach will be able to continue discarding catches of spurdog, it is likely that realised catches will exceed any agreed by-
catch TAC" ${ }^{127}$. In addition, ICES advised that "any possible provision for the landing of bycatch should be part of a management plan, including close monitoring of the stock and fisheries ${ }^{\prime 28}$.

Pew advises that before granting a derogation, STECF should be asked to evaluate to what extent national bycatch avoidance programmes are effectively reducing bycatch and if adequate control is made. At the same time a suitable management plan for the stock should be developed.

## 6. Conclusions

Pew draws the following conclusions on the setting of North-East Atlantic fishing limits for 2017:

- There are important transparency issues that make it difficult to analyse the extent to which the Council set fishing limits in line with the scientific advice.
- The Commission proposal on fishing opportunities (27 $7^{\text {th }}$ October, 2016) was not sufficient to end overfishing, even if it had been adopted by the Council.
- Fisheries ministers subsequently agreed TACs at the Council ( $13^{\text {th }}$ and $14^{\text {th }}$ December, 2016) that were even further away from scientific advice.
- The decisions on TACs for 2017 again demonstrate the Council's reluctance to implement the CFP.
- There has been no real progress in terms of the percentage of TACs set at or below $\mathrm{F}_{\text {MSr }}$ advice.
- Neither the Commission nor any member states publicly presented clear evidence of socioeconomic impacts, which the CFP requires to justify to further delay reaching MSY exploitation rates.
- The analysis indicates that for some TACs subject to the LO fishing opportunities exceed the scientifically advised levels and that for some other TACs partially subject to the LO this might also be the case.
- The 'bycatch provisions' footnotes risk increasing the fishing mortality on the relevant nontarget species above the scientifically advised levels of catches for those stocks.
- Pew is concerned that without adequate monitoring and reporting, national 'bycatch avoidance programmes' may be exploited as a means to legitimise landings instead of actual minimizing bycatch, risking increasing fishing mortality on the stock.


## 7. Key recommendations

Pew issues the following recommendations to improve the setting of north-east Atlantic fishing limits in future years:

- The Council must make significantly more progress in setting TACs for 2018 in line with the CFP's requirements if it is to realise the benefits of ending overfishing ${ }^{29}$.
- The Commission should play its part by making proposals for 2018 TACs fully in line with the CFP, and guiding ministers away from their serial short-termism.
- The Commission should improve transparency of TAC setting. This includes publishing details on the methodologies for TAC 'adjustments' and for matching scientific advice with TAC areas before launching the TAC proposal. We continue to ask the Council to publish any socioeconomic evidence used to justify delays in reaching MSY and to live stream at least the initial exchange of views on the setting of fishing opportunities.

[^5]- Pew recommends that the European Commission seek a scientific assessment of the impacts of the 'bycatch provisions' on the sustainability of the non-target stocks and assess the footnotes' overarching compatibility with setting fishing limits not exceeding the rate that can produce MSY for those stocks as required by the CFP.
- Pew asks that the European Commission seek further scientific evaluation of the picked dogfish 'bycatch avoidance programmes' operated by all participating member states in 2017, and that until such information is available, the derogation TAC should not be granted.

For more information, please contact:<br>Andrew Clayton<br>Project Director, Ending Overfishing in Northwestern Europe, The Pew Charitable Trusts<br>Email: AClayton@pewtrusts.org


[^0]:    ${ }^{1}$ For picked dogfish in ICES areas 1, 5-8, 12 and 14.

[^1]:    ${ }^{2}$ COM(2016) 698, Proposal for a Council Regulation fixing for 2017 the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union fishing vessels, in certain non-Union waters. Articles, Annex I, Annex II-VIII
    ${ }^{3} 51$ in Northern waters: Atlantic Ocean west of Scotland and Ireland, and adjacent waters including the Irish, Celtic and North seas.
    ${ }^{4} 18$ in Southern waters: Bay of Biscay, Portuguese waters, Azores grounds and Union waters of CECAF.
    ${ }^{5}$ Three clear instances where the Commission proposed TACs exceeding scientific advice for stocks where MSY fishing limits are recommended; herring in areas 6a(South), 7b and 7c; herring in areas 5b, 6 b and 6 a (North); and common sole in areas 8ab. Three further instances where it appeared the Commission proposed TACs exceeding MSY advised mortality rates (hake in areas $6,7,5 b, 12$ and 14; hake in areas 8abde; and megrims in areas 8abde). Due to missing information on how the Commission is matching the proposed TACs with the scientific advice. These three TAC proposals were subsequently revised in Commission 'non-papers'.
    ${ }^{6}$ Six clear instances where the Commission proposed TACs exceeding scientific advice for stocks where MSY fishing limits are recommended; herring in areas $6 \mathrm{a}($ South ), 7 b and 7 c ; herring in areas $5 \mathrm{~b}, 6 \mathrm{~b}$ and 6 a (North); common sole in areas 8ab, haddock in area 7a, plaice in area 7a and plaice in 7hjk. One further instance where it appeared the Commission proposed TACs exceeding MSY advised mortality rates (megrims in area 7). Due to missing information on how the Commission is matching the proposed TACs with the scientific advice.
    ${ }^{7}$ These 'non-papers' were not available at the time of drafting the Pews response to the Commission's proposal, and therefore figures presented were not reflected in that document.
    ${ }^{8}$ For some TACs further proposals were made later through Commission non-papers, some of which were made available on the Council website.

[^2]:    ${ }^{9}$ Annex IA - Council Regulation (EU) 2017/127 of 20 January 2017 fixing for 2017 the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union fishing vessels, in certain non-Union waters.
    http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0127\&from=EN
    ${ }^{10} \frac{\text { http://eur-lex.eur }}{\text { This excludes some TACs from Annex IA of the TAC regulation which are not in EU waters (e.g. Barents Sea and Icelandic waters), are in }}$ Greenland and ultra-peripheral waters (e.g. Madeira waters), and/or are grouped TACs as 'others' or 'industrial' species.
    ${ }^{11}$ Number excludes TACs for skates and rays ( $\times 5$ ) and anchovy in areas 9,10 and CECAF 34.1 .1 where scientific advice was published but advice on the catch limits associated with the TAC was not determinable.
    ${ }^{12}$ Average percentage above scientific advice is underestimated since all TACs with advice for zero catch, but where a TAC was set, were considered a fixed value of 100 per cent above advice.
    ${ }^{13}$ Council document PECHE 491, 15502/15 REV1. Joint statement by the Council and the Commission "Ad Specific Data Limited Stocks", which fixes TACs at the same levels until the end of 2018, unless the perception of the status of these stocks changes significantly.
    ${ }^{14}$ For stocks subject to the Landing Obligation, total TACs agreed were compared to catch advice when the LO covers all the fisheries exploiting that stock. This is the case for pelagic species; northern prawn in areas 2a, 4 and 3a; Norway lobster in 3a, 8abde, 8c, 9\&10 haddock in areas $3 \mathrm{a}, 4$ and 6 b , and common sole in areas 7 bc , 7 hjk . When the LO is only applicable to a fraction of the fisheries exploiting the stock, the corresponding TAC was compared to landings advice after adjustments quantities agreed were removed.
    ${ }^{15}$ See footnote 14.
    ${ }^{16}$ Of these, one TAC - plaice in areas 7 hjk did not have advice on fishing rates that correspond to $\mathrm{F}_{\text {MSy }}$ in the previous year.

[^3]:    ${ }^{17}$ The Pew Charitable Trusts has submitted several access to information requests, but has not yet received documentation of socioeconomic evidence justifying a delay in reaching MSY fishing mortality levels.
    ${ }^{18}$ Annexes to EC response to Seas At Risk access to information request 30/01/2017.
    ${ }^{19}$ See for instance - Client Earth, 2016. Mismatch between TACs and ICES advice.

[^4]:    ${ }^{20}$ Data on adjustment in EC response to Seas At Risk access to information request 30/01/2017.
    ${ }^{21}$ See footnote 14.
    ${ }^{22}$ Up to 2 per cent bycatches of dab, whiting and mackerel.
    ${ }^{23}$ Up to 5 per cent bycatches of dab, whiting and haddock.
    ${ }^{24}$ Up to 2 per cent bycatches of $d a b$ and whiting.
    ${ }^{25}$ Up to 5 per cent bycatches of haddock and whiting.
    ${ }^{26}$ Up to 5 per cent bycatches of boarfish, haddock, whiting and mackerel.

[^5]:    ${ }^{27}$ Scientific, Technical and Economic Committee for Fisheries (STECF) - 50th Plenary Meeting Report (PLEN-15-03). 2015. Publications Office of the European Union, Luxembourg, EUR 27602 EN, JRC 98672, 90 pp.
    ${ }^{28}$ ICES 2016. Advice on Spurdog (Squalus acanthias) in the Northeast Atlantic. Published 11 October 2016.
    ${ }^{29}$ World Bank. 2017. The Sunken Billions Revisited: Progress and Challenges in Global Marine Fisheries. Environment and Development. Washington, DC: World Bank. © World Bank.

