Recommendations to the EU on the setting of fishing opportunities for 2025

12 September 2024

The 22 NGO signatories of this document wish to present our recommendations on the setting of fishing opportunities - Total Allowable Catches (TACs) as well as fishing effort restrictions - for 2025, including for stocks managed by the European Union (EU) alone and stocks shared with third countries like the United Kingdom (UK) and Norway. Our intent is to assist the European Commission, the Council of the EU and the Member States in making decisions on fishing opportunities that:

- Finally end overfishing,
- Significantly contribute to restoring and/or maintaining all fish stocks above healthy levels and to minimising levels of incidental catches, and
- Safeguard marine ecosystem functioning and resilience, also in light of the increasing effects of climate change.

Rebuilding its own fish populations is also imperative to strengthen the EU´s food sovereignty and reduce its dependence on imports from sources that are uncooperative, yet competitive, or have a high risk of Illegal, Unreported and Unregulated (IUU) fishing.

1. Missed 2020 sustainability deadline and sluggish CFP implementation

Overfishing and destructive fishing practices have been the main causes of marine biodiversity loss for the last 40 years. They also critically undermine the resilience of fish, crustaceans, corals,

seabirds, marine mammals, and other wildlife to the impacts of climate change, as well as undermining their capacity to mitigate the latter.[1,2] Despite the reduction in overfishing brought about by the Common Fisheries Policy (CFP) in the Northeast Atlantic and Mediterranean during the last decade, the EU still missed the legal deadline to end overfishing and harvest all stocks sustainably by 2020 at the latest.[3,4,5]

As highlighted in Box 1, many stocks remain overfished, some in a dire state and without any effective recovery efforts to date. Despite the 2020 and 2025 deadlines,[6] the EU – both independently and following negotiations with third countries like the UK – has continued to set fishing opportunities above the best available scientific advice provided by the International Council for the Exploration of the Sea (ICES) and, for species in the Mediterranean, the Scientific, Technical and Economic Committee for Fisheries (STECF).[7]

Box 1. The *status quo*: overfishing continues and fishing opportunities exceed scientific advice

The most recent STECF report on the performance of the CFP confirms that "*several stocks remain overfished and/or outside safe biological limits*" and that the "*objective of the CFP which aims to ensure that all stocks are above biomass levels capable of producing maximum sustainable yield has not been fully achieved*".[8] The proportion of Northeast Atlantic Maximum Sustainable Yield (MSY) assessed fish populations subject to overfishing has decreased from over 70% in the mid-2000s to 30% more recently.[9] However, Baltic Sea fish populations are still struggling, overall progress stagnated in 2022, whereas progress made in the Celtic Sea has even been reversing since 2020,[10] and the Mediterranean and Black Seas remain in a dire state with overfishing continuing in 2021 for 61% of assessed stocks.[11] Moreover, many stocks remain data-limited, with unknown stock or exploitation status, while 41% of the stocks with assessed status are outside safe biological limits, up from 39% in 2021.[12]

[1] IPCC (2019). Special Report on the Ocean and Cryosphere in a Changing Climate. IPBES (2019). Global Assessment Report on Biodiversity and Ecosystem Services.
[2] Mariani, G, Cheung, WWL, Lyet, A, Sala, E, Mayorga, J, Velez, L, Gaines, SD, Dejean, T, Troussellier, M, Mouillot, D (2020): Let more big fish sink: Fisheries prevent blue carbon sequestration—half in unprofitable areas. Science Advances Vol 6, Issue 44. 28 October 2020. DOI:10.1126/sciadv.abb4848.
[3] The requirement that "*the maximum sustainable yield exploitation rate shall be achieved […] at the latest by 2020 for all stocks*" in Article 2(2) of, Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy. This Regulation is hereafter referred to as "CFP basic regulation".
[4] Scientific, Technical and Economic Committee for Fisheries (STECF) (2023). Monitoring of the performance of the Common Fisheries Policy (STECF-adhoc-23-01), Publications Office of the European Union, Luxembourg, 2023, doi:10.2760/361698, JRC133325, e.g. pp. 4 and 9.
[5] In the Western Mediterranean the deadline was set for 2025 under the Regulation (EU) 2019/1022 of the European Parliament and of the Council of 20 June 2019 establishing a multiannual plan for the fisheries exploiting demersal stocks in the western Mediterranean Sea and amending Regulation (EU) No 508/2014. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1022. Referred to as "West Med MAP" in this document.
[6] *Ibid.*: whereas Article 2(2) of the CFP basic regulation contains the deadline for achieving sustainable exploitation levels by 2020, the deadline was extended to 2025 in the Western Mediterranean for the stocks under the West Med MAP.
[7] Advice on catch limits for most Northeast Atlantic stocks is provided by ICES, whereas STECF provides advice for the Mediterranean.
[8] European Commission, Joint Research Centre, Scientific Technical and Economic Committee for Fisheries (STECF) Monitoring the Performance of the Common Fisheries Policy (STECF-Adhoc-24-01), Gras, M., Pierucci, A., Mantopoulou Palouka, D., Kupschus, S. and Konrad, C. editor(s), Publications Office of the European Union, Luxembourg, 2024, https://data.europa.eu/doi/10.2760/547228, JRC137731. Quote from p. 12.
[9] *Ibid.*: Based on Tables 3 and 4, p. 31, as of 2022, the most recent year with the relevant data, 25 out of 83 assessed stocks (i.e. 30%) were still exploited above F_{MSY}. Note that the text on p. 5 says that 32% of the assessed stocks were overexploited in 2022, whereas the figures presented in the Tables suggest 30%.
[10] *Ibid.*, Figure 4, p. 30 and Tables 3 and 4, p. 31.
[11] *Ibid.*, Figure 20, p. 52, with 39 out of 64 stocks still fished above F_{MSY} in 2021, the most recent year with the relevant data.
[12] *Ibid.*, p. 5. Based on Tables 5-6, p. 33, 19 out of 46 assessed stocks (i.e. 41%) were still outside safe biological limits, compared to 39% in 2021.

TAC-setting still falls well short of the CFP's legally binding obligation to end overfishing by 2020: according to a recent analysis of EU-only and EU/UK shared TACs,[13] almost half (48%) of the assessed TACs still exceeded scientific advice for 2020, with gradual but insufficient progress since then (44% for 2021, 34% for 2022, 25% for 2023 and 24% for 2024). Moreover, precautionary advice for data-limited stocks continues to be exceeded more frequently (44%) than MSY-based advice for fully assessed stocks (20%), as well as for bycatch (46%) compared to target (9%) stocks.[14] The outlook presented in this year's report by the UK's Centre for Environment, Fisheries and Aquaculture Science (Cefas) is even less encouraging, concluding that only 46% of the assessed TACs negotiated by the UK for 2024 (including for example the EU/UK and EU/UK/Norway negotiations) followed scientific advice (i.e. more than half still above advice).[15] This includes 52% for stocks with MSY advice and only 33% for data-limited stocks with precautionary advice (i.e. 48% and 67% still above the respective advice), highlighting that progress for the latter is particularly lagging behind.

Although progress has been made for commercially important fish populations over the past decade, EU Member States have failed to attain Good Environmental Status (GES) for most stocks, as required in the Marine Strategy Framework Directive (MSFD), and a substantial proportion of stocks are still poorly managed.[16] Justifications presented by EU and UK decision-makers often revolve around a lack of scientific data, the lower economic importance of certain stocks or the risk of "choking" other fisheries if scientific advice for stocks caught primarily as bycatch was followed.[17]

In this context, it is worth recalling that, in a legal case regarding the CFP's missed 2020 MSY deadline,[18] the Court of Justice of the European Union (CJEU) ruled earlier this year that, while this deadline indeed applies to all target stocks, i.e. overfishing them beyond 2020 is illegal, the Council has some margin of discretion for "bycatch" stocks under certain conditions, in relation to situations where following the scientific advice would lead to a premature closure of a fishery due to the "choke" situation.[19] This part of the CJEU ruling overturned last year's Opinion by Advocate

[13] ClientEarth (2024). Taking stock 2024 – are TACs set to achieve MSY? This report is currently being finalised and due to be published later this year. ClientEarth's analysis covers those TACs set by the EU alone as well as those shared between the EU and the UK, excluding cases where the TAC and ICES advice do not cover the same area and are thus not directly comparable. The preliminary results presented here are based on the same scope and methodology described in ClientEarth's latest report: ClientEarth (2023). Taking stock 2023 - are TACs set to achieve MSY? November 2023.

[14] *Ibid*., results to be published later this year.

[15] Centre for Environment Fisheries and Aquaculture Science (Cefas) (2024). Assessing the sustainability of fisheries catch limits negotiated by the UK for 2024. 10 April 2024. https://www.gov.uk/government/publications/assessing-the-sustainability-of-fisheries-catch-limits-negotiated-by-the-uk-for-2024/assessing-the-sustainability-of-fisheries-catch-limits-negotiated-by-the-uk-for-2024. Note that discrepancies between the results of these two analyses are most likely due to differences in scope and parts of the methodology used, but both confirm that many TACs continue to exceed scientific advice and progress has been limited.

[16] For example, the MSFD implementation report produced by the European Commission in 2020 concludes that "*Biodiversity loss was not halted in Europe's seas during the first MSFD cycle"* and that *"The biodiversity of marine ecosystems is still vulnerable in Europe's seas and the good state of habitats and species is not secured*." COM(2020) 259 final, REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the implementation of the Marine Strategy Framework Directive (Directive 2008/56/EC), p. 16.

[17] The term "choke" refers to a situation where no quota is available for one or more "choke" stocks, even though quotas for other more abundant stocks caught together in the mix have not been fully exhausted yet. Setting and respecting TACs set based on the scientific advice for "choke" stocks (which are often depleted and subject to zero-catch advice) can thus "choke" mixed fisheries that target more abundant stocks while also catching the unwanted "choke" species as bycatch. The term "choking" in this context means that fishers have to stop fishing, even though they still have quota for some of the stocks they are catching.

[18] The requirement that "*the maximum sustainable yield exploitation rate shall be achieved […] at the latest by 2020 for all stocks*" in Article 2(2) of the CFP basic regulation.

[19] Judgement of 11 January 2024, Case C–330/22 *Friends of the Irish Environment v. The Minister for Agriculture, Food and Marine, Ireland and the Attorney General,* ECLI:EU:C:2024:19. https://curia.europa.eu/juris/document/document.jsf;jsessionid=58598DC1806FA841C9D4919E16C0D233?text=&docid=281144&pageIndex=0&doclang=en&mode=req&dir=&occ=first&part=1&cid=8601409. See for example paragraph 75.

General Ćapeta,[20] that the CFP's 2020 MSY deadline applies to all stocks, without exception, i.e. including stocks primarily caught as bycatch.[21]

Importantly, the failure so far to prioritise the rapid recovery of depleted and struggling fish populations only perpetuates their dire state and traps fisheries in an undesirable situation that is eternally overshadowed by "choke" risks. This approach fuels a vicious cycle of overfishing already depleted stocks to avoid short-term quota cuts or closures, preventing stock recovery and gambling away ocean health and a productive future for fisheries and coastal communities in the long-term.

It is therefore crucial to recall that, regardless of the CJEU ruling on the Council's discretion in relation to the CFP's 2020 MSY deadline (regarding fishing pressure), this ruling in no way removed or loosened **the unambiguous obligation of the CFP's MSY objective to restore and maintain all stocks (without distinction between target and bycatch stocks) above biomass levels capable of producing the MSY**.[22] Yet, contrary to the CFP's requirements, many stocks have been in a dire state for many years without effective rebuilding efforts (see section 7) and it is the responsibility of the Commission, the Council and individual Member States, in collaboration with third countries like the UK that the EU shares stocks with, to finally change that.[23]

Deprioritising certain stocks, for example based on data limitations or bycatch issues, goes against the CFP's key principles, in particular the MSY objective, which explicitly applies to all stocks, as well as the precautionary approach and the ecosystem-based approach which must underpin EU fisheries management.[24]

It also undermines the EU's claim to be a leader in sustainable fisheries management and falls short of EU obligations relating to the application of the precautionary principle as required under Article 191(2) of the Treaty on the Functioning of the European Union (TFEU),[25] and of international commitments under the Trade and Cooperation Agreement (TCA) between the EU and the UK,[26] the United Nations Fish Stocks Agreement[27] (UNFSA) and Sustainable Development Goal (SDG) 14.[28]

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[20] Case C-330/220 Friends of the Irish Environment CLG v Minister for Agriculture, Food and the Marine, Ireland, Attorney General EU:C:2023:487. https://curia.europa.eu/juris/documents.jsf?num=C-330/22. OPINION OF ADVOCATE GENERAL ĆAPETA delivered on 15 June 2023.

[21] *Ibid*., paragraphs 30, 31 and 42. She considered that "*by setting a fixed deadline, the EU legislature aimed to prevent the Council from putting short-term economic interests before the overarching long-term goal of progressively restoring and maintaining populations of fish stock above biomass levels capable of producing MSY*". She further argued that "*Article 2(2) of the CFP Basic Regulation binds the Council in two ways. First, the MSY goal cannot be circumvented after the year 2020 (a). Second, that goal concerns all stocks, without distinction, whether or not in certain fishing operations they are referred to as 'target stock' or as 'by-catch' (b)*", and ultimately concluded that "*the CFP Basic Regulation did not leave any discretion to the Council to depart from the MSY obligation in relation to by-catch when setting fishing opportunities in mixed fisheries*".

[22] The "*objective of progressively restoring and maintaining populations of fish stocks above biomass levels capable of producing maximum sustainable yield*" and to "*aim to ensure that exploitation of marine biological resources restores and maintains populations of harvested species above levels which can produce the maximum sustainable yield*", in Article 2(2) of the CFP Basic Regulation, Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy. This is also a legal obligation established in Annex 2 of the 1995 UN Fish Stocks Agreement with respect to the management of straddling and highly migratory fish stocks.

[23] A number of legal questions remain unanswered following the CJEU ruling, for example regarding the role of the ecosystem-based and precautionary approaches in TAC-setting (see sections 2 and 4) and the applicability of the CJEU's conclusions beyond the four bycatch TACs for 2020 in the focus of that ruling. The outstanding judgement in the joined Cases T-577/22 and T-648/22 ClientEarth AISBL v Council of the European Union may provide further insights on the matter.

[24] *Ibid.,* Articles 2(2) and 2(3).

[25] EC, COM(2000) 1 final. 2000. Communication from the Commission on the precautionary principle.

[26] Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community, of the one part, and the United Kingdom of Great Britain and Northern Ireland, of the other part. In force since 1 January 2021. Fisheries-related provisions are included under Heading 5.

[27] UN, Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.

[28] Sustainable Development Goals on life under water (SDG14). https://sustainabledevelopment.un.org/sdg14.

Overfishing persists and the CFP is a mission not yet accomplished.[29] The EU, including the Commission, the Council and individual Member States, must act now to remedy this situation. The CFP's success and the EU's credibility are at stake. The position of the undersigned NGOs is that the CFP is fit for purpose and that the upcoming CFP evaluation must identify how to address shortcomings in the current policy and its implementation, such as how to better deliver on social objectives, or climate adaptation and resilience. We therefore call on EU decision-makers to explore ways to improve its implementation and address identified deficiencies within the existing framework or through other legal instruments but without opening the CFP to reform.

Setting fishing opportunities in line with exploitation levels that are not just sustainable from a single-stock perspective, but also future-proof fisheries by promoting ecosystem health, as well as applying and controlling the implementation of the Landing Obligation (LO), are fundamental to sustainable fisheries management and must remain top priorities for decision-makers. The CFP must be fully implemented if the EU is to deliver on the objectives of the European Green Deal and Biodiversity Strategy, improve the energy efficiency of the fishing fleet, and honour its international commitments.

2. Key recommendations on setting fishing opportunities

Persistent political decisions to set fishing opportunities above scientifically advised levels and with little regard to ecosystem impacts perpetuate overfishing of Northeast Atlantic and Mediterranean fish populations, including vulnerable deep-sea species, and are a substantial roadblock in sustainable fisheries management. We therefore call on the European Commission and on the Council to stop repeating past management errors and to show political strength of will to fulfil the EU's commitments related to the setting of fishing opportunities.

In light of the current biodiversity and climate crises, it is imperative to rebuild all stocks well above sustainable and productive levels in order to enable them to cope with and mitigate mounting pressures. **We therefore strongly recommend investing in the resilience of populations and ecosystems by fishing well below the maximum catch level advised by ICES, and STECF for the Mediterranean, in the single-stock advice**,[30] rather than setting fishing opportunities precisely at this level as a default (also see section 4 for further details). There are plenty of reasons for this approach, such as the need to

(a) maximise stock and ecosystem health and resilience in the face of climate change and other challenges,[31] such as a projected increasing frequency of marine heatwaves;

(b) maximise the potential of fish populations to contribute to effective oceanic carbon sequestration to mitigate against climate change;[32]

[29] For more aspects of CFP implementation, please see the NGO policy paper "Common Fisheries Policy: Mission Not Yet Accomplished" (2021). NGOs identify nine specific challenges in this paper (overfishing, especially in the Mediterranean Sea, the LO, harmful impacts of fishing, the transition to low-impact fisheries, harmful subsidies, regionalisation, the external dimension, and climate change) and propose a list of actionable solutions. Also see Pew's "Lessons From Implementation of the EU's Common Fisheries Policy" (2021).

[30] While this section focuses on ICES advice provided for NE Atlantic stocks, the same issues are relevant for the STECF advice provided for the Western Mediterranean. For detailed recommendations on fisheries management in the Western Mediterranean, please refer to section 5.

[31] See section and Box 4. Also see Sumaila, UR, de Fontaubert, C, Palomares, MLD (2023). Editorial: How overfishing handicaps resilience of marine resources under climate change. Front. Mar. Sci., 15 August 2023. Sec. Marine Fisheries, Aquaculture and Living Resources. Volume 10, 2023.

[32] Saba, GK, Burd, AB, Dunne, JP, Hernández-León, S, Martin, AH, Rose, KA, Salisbury, J, Steinberg, DK, Trueman, CN, Wilson, RW, Wilson, SE (2021). Toward a better understanding of fish-based contribution to ocean carbon flux. Limnology and Oceanography, Volume 66, Issue 5, pp.1639-1664.

(c) factor in the risk of illegal discarding;[33]
(d) minimise and where possible reverse impacts of fishing on ecosystems, e.g. by fully accounting for predator needs and other ecosystem dynamics;[34]
(e) safeguard and rebuild depleted or vulnerable fish populations in mixed fisheries;[35]
(f) provide a buffer in case of unexpected changes in the perception of the exploitation and status of fish populations and the underlying assessments;[36] and
(g) facilitate long-term market stability and predictability by avoiding large fluctuations in TACs and corresponding catches between years.

A recent study published in Science last month, based on an investigation of 230 fisheries around the world, found that "*populations of many overfished species are in far worse condition than has been reported*",[37] showing that "*[c]urrent stock assessment models overestimate productivity and recovery trajectory*", particularly for overfished stocks.[38] This further supports our recommendation to set fishing opportunities below scientific advice to mitigate the risk that the underlying stock assessments may in hindsight turn out to have been too optimistic about the state and recovery of fish populations. While this approach of setting fishing opportunities below the advice may require a decrease in certain fishing opportunities in the short-term, it is a key way of future-proofing EU fisheries and maximising their potential to be sustainable and ultimately more productive and profitable in the long-term. Sustainable, ecosystem-based fishing opportunities must also be underpinned by robust and comprehensive monitoring and enforcement to ensure that catches are fully documented and accounted for. The swift roll-out of remote electronic monitoring (REM) with cameras is essential in this context.

Importantly, as already explained in the NGO Baltic TAC recommendations,[39] **while the current ICES advisory framework indeed reflects the CFP's requirement to exploit fish populations at or below the MSY exploitation rate, it for example does not yet explicitly incorporate key requirements under the MSFD regarding population health and food web integrity**. This means that the current ICES headline advice is neither geared towards ensuring that stocks exhibit "*a population age and size distribution that is indicative of a healthy stock*" (MSFD Descriptor 3), nor that "*all elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity*" (MSFD Descriptor 4).

[33] See section 6 and Box 6.
[34] See section 4 and Box 4.
[35] *Ibid.*
[36] West of Scotland whiting could serve as a positive example, for which the increase in catch advice from zero catch to 4114 t in 2022 was not immediately fully exhausted. Fishing mortality for this stock currently remains low whereas the stock is below MSY $B_{trigger}$ and projected to decrease. ICES (2024). Whiting (Merlangius merlangus) in Division 6.a (West of Scotland). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.25019723.v1, Table 6, p. 4 and Figure 1, p. 1.
[37] Edgar, G (2024). Investigation reveals global fisheries are in far worse shape than we thought – and many have already collapsed. 23 August 2024. https://theconversation.com/investigation-reveals-global-fisheries-are-in-far-worse-shape-than-we-thought-and-many-have-already-collapsed-237306. The underlying study is: Edgar et al. (2024). Stock assessment models overstate sustainability of the world's fisheries. Science, 385(6711), pp. 860-865. https://www.science.org/doi/10.1126/science.adl6282.
[38] Froese, R & Pauly, D (2024). Taking stock of global fisheries. Current stock assessment models overestimate productivity and recovery trajectory. Science, 385(6711), pp. 824-825. https://www.science.org/doi/10.1126/science.adr5487. This article presents a perspective on the above-mentioned paper by Edgar et al. (2024) published in the same Science issue. It highlights that, while "*hindsight historical last biomass estimates were more or less accurate for sustainably fished stocks*", "*[f]or stocks that were overfished, however, historical biomass estimates were substantially overestimated compared with more recent assessments*", and "*rising trends in biomass reported for overfished stocks were often inaccurate, resulting in so-called phantom recoveries for stocks where actual biomass was fluctuating at a low amount or even declining*". The paper concludes that the "*main reason for the overestimation of recent biomass is the tendency of standard models to overestimate productivity at depleted stock levels. That tendency is apparent at the low range of biomass (typically between 20 and 40% of maximum biomass) predicted as sufficient to support maximum sustainable catches*".
[39] Joint NGO recommendations on Baltic Sea fishing opportunities for 2025. 18 June 2025, pp. 6-7. https://www.fishsec.org/2024/06/18/joint-ngo-recommendations-on-baltic-sea-fishing-opportunities-for-2025/.

Moreover, we are concerned that the current advisory framework and approach to setting fishing opportunities are not sufficiently precautionary, nor explicitly geared towards a rapid stock recovery, which is crucial in light of the dire state of many fish populations (see section 7). For example, despite the clear legal requirement to restore and maintain all stocks above biomass levels capable of producing MSY (B_{MSY}), the ICES MSY approach heavily relies on the use of MSY $B_{trigger}$ as a proxy (where B_{MSY} is unknown). This is problematic a) because MSY $B_{trigger}$ can be well below B_{MSY}, and b) in the absence of better estimates it is usually set at the B_{pa} level, below which a stock is outside "safe biological limits" (i.e. there is a higher risk of the stock actually being below B_{lim}, the lowest reference point where recruitment is impaired).[40] Therefore, this approach is from the outset aimed towards a potentially much lower biomass level than the legally required one (i.e. biomass levels above B_{MSY}). Moreover, the ICES advisory framework clearly states that ICES will give catch advice even when a stock is below B_{lim} if the projection is that the Spawning Stock Biomass (SSB) of the stock will be above B_{lim} after the fishing year in question with only 50% probability,[41] i.e. when there is still a 50% risk of the stock actually remaining below B_{lim}. We do not consider this ambitious enough as it risks keeping fish populations in a precarious situation for longer than if their rapid recovery was prioritised. In this context, we are also concerned that in some cases, such as West of Scotland whiting[42] and North Sea sole,[43] the ICES headline advice is projected to keep, or allow stocks to fall, below MSY $B_{trigger}$, even though other catch options are available that would allow them to remain at or above this level or at least increase towards it. Setting TACs at (rather than below) such levels would fail to meet the CFP's MSY objective of recovering and maintaining all stocks above levels capable of producing MSY.

We call on the EU, the UK and other ICES advice clients, to work with ICES to address the above concerns to ensure that future ICES advice fully reflects all relevant ecological policy objectives.[44] In the meantime, in line with the legally required precautionary approach, it is the responsibility of the EU, as well as other Parties that exploit shared stocks like the UK and Norway, to explicitly integrate the necessary precaution into TAC-setting, where the currently available single-stock advice does not yet fully reflect and safeguard ecosystem integrity and dynamics and/or is not geared towards rapid recovery above sustainable population levels with a healthy age/size structure.

With regards to last year's push by some Member States for multiannual TACs, we remain concerned about the impact this might have on sustainable TAC-setting in line with the most up-

[40] Also see the explanation of B_{lim} and B_{pa} in the report on Workshop on ICES reference points (WKREF1): *"B_{lim}: A deterministic biomass limit below which a stock is considered to have reduced reproductive capacity. For stocks where quantitative information is available, a reference point B_{lim} may be identified as the stock size below which there is a high risk of reduced recruitment.*" and "*B_{pa}: A precautionary safety margin incorporating the uncertainty in ICES stock estimates leads to a precautionary reference point B_{pa}, which is a biomass reference point designed to have a low probability of being below B_{lim}.*" ICES (2022). Workshop on ICES reference points (WKREF1). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.9822, p. 9.

[41] ICES (2023). Advice on fishing opportunities (2023). General ICES Advice guidelines. Report. https://doi.org/10.17895/ices.advice.22240624.v2 p. 6.

[42] ICES (2024). Whiting (Merlangius merlangus) in Division 6.a (West of Scotland). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.25019723.v1. The headline advice of 5116 t is projected to result in a -7% SSB decrease (down from the 2025 SSB estimate of 23982 t), bringing the stock to 22315 t, which is only 87% of the MSY $B_{trigger}$ of 25597 t. Meanwhile, the SSB (2026) = B_{pa} = MSY $B_{trigger}$ scenario of 1469 t would allow the stock to increase to MSY $B_{trigger}$.

[43] ICES (2024). Sole (Solea solea) in Subarea 4 (North Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.25019669.v1. The headline advice of 10196 t is projected to result in a -20% SSB decrease (down from the 2025 SSB estimate of 61320 t), bringing the stock to 48710 t in 2026, which is only 93% of the MSY $B_{trigger}$ of 52532 t. Meanwhile, the SSB (2026) = B_{pa} = MSY $B_{trigger}$ scenario of 5411 t would keep the stock at MSY $B_{trigger}$.

[44] See for example this briefing by the Pew Charitable Trusts (2024): To Improve Fisheries Management and Protect Ecosystems, Decision Makers Must Ask Better Questions. February 2024. https://www.pewtrusts.org/-/media/assets/2024/02/to-improve-fisheries-management-and-protect.pdf.

to-date, best available scientific advice. While the desire for stability and predictability for the industry is understandable, we believe that the best way to achieve this is to allow stocks to recover well enough above sustainable levels to minimise the risk of large fluctuations in stock size between years, and to refrain from fully exhausting every increase in catch advice. **If multiannual TACs are nonetheless pursued, this must be done in a way that does not impede the ability of decision-makers to follow the best available scientific advice, nor result in new information about a potential change in stock status not being requested or used**. This may require setting TACs well enough below the respective ICES headline advice to provide a buffer against unforeseen stock decreases. In any case, safeguards are needed to ensure that TACs are reduced accordingly where new scientific advice indicates the stock status has deteriorated compared to when the multiannual TACs were initially set.

As for data-limited stocks, we welcome the ongoing work within ICES to further develop methods to provide quantitative advice using available information for example on life history traits and exploitation characteristics.[45] **We strongly recommend that remaining data gaps are explicitly identified on a stock-by-stock basis and that concrete roadmaps as to what is needed to effectively address them going forward are developed and implemented as a matter of urgency**. Lifting stocks out of the data-poorest categories, where only landings information is available, is crucial to move on from the current situation where precautionary advice, often criticised by industry for the use of the precautionary buffer, is exceeded on a regular basis. The recent examples of Celtic Sea pollack[46] and Irish Sea cod[47] which both moved from (routinely exceeded) precautionary advice to zero-catch advice based on the MSY approach, confirming their severely depleted state, should serve as a (pre)cautionary tale on the consequences of ignoring precautionary advice.

Box 2 below outlines our main recommendations on the setting of fishing opportunities for 2025.

Box 2. Key recommendations for the setting of fishing opportunities for 2025

- **Set catch limits well below the best available scientific single-stock advice provided by ICES, where this does not yet fully reflect and safeguard ecosystem integrity and dynamics and/or is not explicitly geared towards rapid recovery above sustainable population levels, in order to maximise long-term population and ecosystem health and productivity**. This is necessary both for stocks with advice based on the ICES MSY approach and for stocks with advice based on the ICES precautionary approach for data-limited stocks. Importantly, the ICES headline advice

[45] The ICES WKLIFE workshops have been developing quantitative assessment methodologies for data-limited stocks. See for example https://www.ices.dk/community/groups/Pages/WKLIFEX.aspx and https://www.ices.dk/community/groups/Pages/WKLIFEXI.aspx.

[46] ICES (2023). Pollack (Pollachius pollachius) in subareas 6–7 (Celtic Seas and the English Channel). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.21841011.v1. This stock was subject to precautionary advice of 3360 t from 2019 to 2023 which was exceeded substantially in all years (the sum of the two relevant TACs was 12560 t in 2019, 12401 t in 2020, 9610 t in 2021, 8168 t in 2022 and 6535 t in 2023), see Table 6, p. 4. The most recent ICES advice for 2025 confirms that the stock is at the lowest level ever recorded and has been below B_{lim} since 2016. ICES (2024). Pollack (Pollachius pollachius) in subareas 6-7 (Celtic Seas and the English Channel). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.25019477.v1

[47] ICES (2022). Cod (Gadus morhua) in Division 7.a (Irish Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.19447895.v1.The stock was subject to precautionary advice between 2020 and 2022 which has been exceeded (TAC of 257 t versus advice of 116 t in 2020; 206 t vs. 93 t and 74 t in 2021 and 2022, respectively, see Table 6, p. 5). The most recent ICES advice for 2025 confirms that the stock has been below B_{lim} since 2021. ICES (2024). Cod (Gadus morhua) in Division 7.a (Irish Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.25019231.v1.

presented at the top of the respective ICES single-stock advice document represents the maximum level of catches not to be exceeded from the single-stock perspective, rather than a target or absolute recommendation aimed at safeguarding ecosystem health and/or ensuring stock recovery. Indeed, TACs need to be set well below this headline advice in order to safeguard other stocks caught in the same fisheries and/or to factor in additional pressures or ecosystem dynamics (see below and section and Box 4), where these aspects are not fully reflected in the headline advice. To operationalise this, the EU and third parties with which it has fisheries agreements such as the UK could develop options for a quantitative precautionary approach to TAC-setting that can be used as a default in the absence of fully ecosystem-based, recovery-focused ICES advice and that involves setting TACs as follows:

  - *For stocks below MSY $B_{trigger}$ and/or B_{pa} and/or B_{lim}* (also see section 7): at or below levels that aim for recovery within no more than twice the time needed for recovery in the absence of fishing (T_{MAX}/T_{MIN} <= 2, as suggested by ICES WKREBUILD2),[1] and where such bespoke rebuilding-focused advice is not available, a minimum increase in biomass to be defined based on the specific stock situation and available catch options and their corresponding biomass projections.[1] Moreover, the EU (for shared stocks together with its international negotiation partners) should urgently develop and implement effective rebuilding plans and remedial measures (reflecting the findings of WKREBUILD2) for all populations below MSY $B_{trigger}$ (see Box 7).
  - *For stocks at or above MSY $B_{trigger}$ and/or which are below but have catch options that allow for an increase above MSY $B_{trigger}$*: at or below levels that allow for population sizes to recover or be maintained at or above a certain percentage above the MSY $B_{trigger}$,[1] to build in a safeguard to buffer against climate change impacts and/or population fluctuations (also see section 4).[1] For example, TAC-setting could be based on aiming for biomass levels of 120%, 150% or 200% of the MSY $B_{trigger}$ or even more, depending on the specific stock situation and available catch options and their corresponding biomass projections.[1]
  - *For all stocks*: at a maximum of a certain fraction, such as 80% (or another, lower level, depending on the stock situation), of the ICES single-stock headline advice, to build in a precautionary safeguard in the face of uncertainty around ecosystem needs and dynamics.[1]

- **Work with ICES and other ICES advice clients to ensure that future requests for scientific advice on fishing opportunities are explicitly geared towards (1) rapid rebuilding of populations that are below sustainable biomass levels, (2) reaching and maintaining population levels well above B_{MSY} with a healthy age/size structure, and (3) fully accounting for ecosystem needs and dynamics.[1]** These requests must also fully reflect EU, UK and international environmental legislation, including for example ecological objectives regarding GES under the EU's MSFD and the UK's Marine Strategy Regulations 2010. In the absence of such fully ecosystem-based and recovery-focused scientific advice, ICES advice clients should request

sufficiently precautionary alternative catch options that minimise the risks to population and ecosystem health, and in the meantime must build the necessary precaution into TAC-setting themselves by setting fishing limits below the single-stock headline advice (see above and section 4).

- **Apply the precautionary approach** (as defined by the UNFSA and enshrined in the CFP) when setting TACs for stocks where scientific advice based on the MSY approach is not available and/or where the available advice does not fully reflect ecosystem needs and dynamics. This includes the setting of precautionary fishing limits and additional measures to mitigate the risk of overfishing, as well as enhanced monitoring and data collection to enable the definition of MSY reference points or suitable proxies for the stocks concerned. This is also critical for deep-sea stocks since most of these remain subject to precautionary advice. The application of the precautionary approach in the ecosystem context also means that the EU and other Parties exploiting shared stocks such as the UK and Norway must a) explicitly request ICES to provide sufficiently precautionary catch options to account for ecosystem needs and dynamics, where these are not yet fully reflected in the current ICES single-stock advice, and b) build the necessary precaution geared towards minimising risks to population and ecosystem health into TAC-setting, where such ecosystem-based and/or precautionary catch options are not yet available.
- **Fulfil the EU's legal obligation to take an ecosystem-based approach to fisheries management, including for forage fish as well as top predators like sharks**. One fundamental step of fully implementing ecosystem-based fisheries management (EBFM) is to set TACs within ecological limits, i.e. TACs that account not just for the population health of target species but for the effects of fisheries on non-target species and food webs as well as for relevant environmental conditions. This is especially critical for forage fish (including for example Norway pout, sandeel, herring, sardines, anchovy and sprat) which have an important ecological role in supporting marine wildlife (such as seabirds, marine mammals and commercial fish species). This requires setting their TACs below the advised levels where ecosystem needs are not already fully factored into the scientific advice the TACs are based on, as well as commissioning the science needed to better account for these needs. See section 4 for details.
- **Set TACs below the maximum catch advice for species vulnerable to the impacts of climate change and/or marine heatwaves**, or subject to other pressures or stressors, to provide a "climate buffer", and improve population resilience and invest in larger stocks with a healthy age/size structure and higher long-term productivity. See section 4 for details.
- **For stocks caught and assessed within a mixed fishery, factor in ICES mixed fisheries considerations** to ensure that all stocks are restored and/or maintained above biomass levels capable of producing MSY. This means setting TACs for the more abundant stocks below their single-stock advice, where this is necessary to safeguard the more vulnerable stocks caught in the fishery. See section 4 for further details. The EU and its negotiation partners like the UK should prioritise addressing any remaining

concerns about the data or approach used in the current ICES mixed fisheries considerations, in order to support the effective application of the latter in TAC-setting.

- **For stocks managed through Multi-Annual Plans (MAPs), ensure that F_{MSY} point values are not exceeded**. In order to restore and maintain stocks above biomass levels capable of producing the MSY, as required by the CFP, exploitation levels need to be set below F_{MSY}, especially for stocks that are currently still below the MSY biomass level. Therefore, while the MAPs allow for the use of the upper F_{MSY} range under certain limited conditions, TACs should not exceed the F_{MSY} point value, and should in fact be set within the lower F_{MSY} range or even below that where this is necessary to safeguard other stocks in the same fisheries and/or boost stock resilience to other pressures.
- **If multiannual TACs are pursued, ensure that these do not result in a failure to follow the most up-to-date best available scientific advice, or a failure to request such advice.** Safeguards are needed to ensure that TAC-setting remains responsive to stock declines.
- **In the Mediterranean Sea, Member States should tackle overcapacity in the fleet**, and particularly improve control of engine power of trawlers to prevent fraud which seriously undermines the fishing effort regime. Data collection and stock assessments should be improved as well.
- **Fully implement the MAP for the Western Mediterranean**, particularly through the adoption of legally-mandated safeguard measures for fish populations below B_{lim} and B_{pa} levels, as well as further fishing effort restrictions. Additionally, the European Commission and Member States should prioritise the provision of disaggregated scientific data to inform and hone tailored reductions in fishing days and consider the potential addition of new gears, species and catch limits to the MAP. This is crucial to tackle excessive fishing mortality and achieve MSY exploitation by 2025[1] at the latest. See section 5 for details.
- **Factor in the widely recognised lack of compliance with the LO by reversing the quota uplifts that were given to avoid choke risks caused by the LO and set TACs below the ICES headline catch advice**, to ensure the agreed TAC does not lead to fishing mortality beyond sustainable levels.[1] If quota adjustments are granted to account for previous discards, Member States should make them accessible only to vessels which demonstrate full compliance with the LO. See section 6 for details.
- **In the case of stocks with zero catch advice, ensure that 'bycatch TACs' are not granted** unless and until the relevant Member States put in place a bycatch reduction and population rebuilding plan that effectively (1) reduces bycatch, (2) sets the relevant stocks on a pathway to recovery above levels capable of producing MSY as soon as possible, and (3) is closely monitored and enforced using remote electronic monitoring (REM) with cameras, supported by onboard observer coverage as appropriate. See section 7 for further details.
- **Do not remove TACs**, as the removal of a direct limit on fishing mortality is not a sustainable management solution. In instances where a TAC has already been removed

(e.g. dab and flounder and several deep-sea stocks), it should be reinstated. Removing a TAC downgrades the concerned stock from a situation where the catches are capped to limit fishing mortality, to a situation where catches are effectively unlimited. Even if a stock is not directly targeted, removing a TAC could leave a stock exposed to an unsustainably high fishing mortality, such as through high discarding rates.

- **When considering (re)opening of fisheries, for example following signs of population increases, apply a gradual, precautionary approach to safeguard population health, particularly for vulnerable species.** For example, the spurdog fishery was reopened with individuals of 100 cm or less being taken off the prohibited species list and a TAC which fully exploits the ICES advice. As it had taken over a decade of strict management measures to see tentative recovery, the reopening should have been more cautious, as noted by the UK-EU Written Record,[1] to prevent a boom and bust scenario. We urge caution when considering relaxing any of the current management measures, as the population is already vulnerable to increasing market demand.
- **Apply a precautionary approach and ensure that robust fisheries management and monitoring measures are in place before considering opening new fisheries or expanding existing fisheries in response to climate change-related changes in fish population distribution**. Importantly, in the context of climate change a growing body of scientific research indicates and/or projects shifts in the distribution of certain species, for example northwards and/or into deeper waters, in response to ocean warming and related factors.[1] This could leave fish populations or parts thereof exposed to fishing in areas where those species previously did not occur and no catch limits or other management measures are in place yet. In addition to promoting timely updates regarding information on population distribution used in stock assessments for scientific catch advice, the EU and any third Parties involved in exploiting shared stocks must minimise the risk of unregulated fishing, by committing to not pursuing emerging fisheries in new areas and/or of new species until sustainable fisheries management measures, including science-based fishing limits and sharing arrangements between all relevant parties, have been put in place. Where such catches occur as part of existing fisheries for other stocks, they need to be reliably monitored and accounted for when setting fishing limits (by deducting the relevant quantities or precautionary estimates where data are limited) to ensure that these catches do not contribute to overfishing.
- **Prioritise and apply environmental criteria for national allocation of fishing opportunities**,[1] for example through incentivising use of selective fishing gear and low impact fishing practices (such as avoiding bycatch of non-targeted marine life and damage to the seabed) and directing quota away from destructive fishing practices and parts of the fleet with a history of non-compliance. The European Commission should provide a precise definition of low-impact fishing, monitor compliance with Article 17 of the CFP basic regulation, and require the Member States to make their allocation criteria public.

- **The Council should increase the transparency of the decision-making process regarding fishing opportunities** and apply the recommendations of the European Ombudsman to proactively publish documents related to the adoption of the TAC Regulation at the time they are circulated to Member States or as soon as possible thereafter.[1] Transparency principles should also be applied to the negotiations with the UK, Norway and other coastal states, in line with the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention).[1] This includes continued access for NGOs to relevant plenary sessions of international negotiations as well as engagement with the relevant negotiation teams throughout the process.

3. Fish stocks shared with third parties

Many decisions on fishing opportunities for fish stocks of interest for the EU need to be agreed with third parties such as the UK, Norway, or through the Northeast Atlantic Fisheries Commission (NEAFC) Coastal States process. The EU is a NEAFC Contracting Party and has established bilateral agreements and memoranda of understanding with the main Northeast Atlantic coastal fishing states, including the comprehensive TCA with the UK. While such arrangements provide management and negotiation frameworks, the setting of annual fishing opportunities still depends on annual negotiations between the EU and these third parties.

To date, international agreements for Northeast Atlantic shared stocks have failed to deliver sustainable exploitation of these resources. The frequent inability to reach a consensus on stock shares, as seen with mackerel,[48] has led some parties to set their own quotas, the sum of which exceeds the agreed TAC and/or the scientific advice, resulting in overfishing.[49] The EU and the third parties with which it shares fish resources must become constructive partners in the fight against overfishing, biodiversity and habitat loss, and climate change. To achieve this, we urge the EU and coastal states involved in the setting of fishing opportunities for shared stocks to follow the recommendations in Box 3 below.

Box 3. Recommendations on fish stocks shared between the EU and third countries

- **Ensure that the legal obligations of the CFP are upheld in the negotiations**, i.e. that total fishing limits for all exploited fish populations do not exceed the scientifically advised levels in line with the CFP's sustainability objectives and that the EU reliably demonstrates that its negotiating position was indeed fully aligned with the latter. If the resulting overall fishing limits nevertheless exceed scientific advice, despite the EU's best efforts, the EU must not make its share of the overshoot above the advice available to its fishers.
- **Champion ecosystem-based fisheries management, including TAC-setting, in negotiations with third countries**, to boost the health, resilience and productivity of

[48] Note that while some of the relevant Coastal States (UK, Norway, Faroes) reached a partial agreement on mackerel in June 2024, a comprehensive sharing arrangement involving all relevant Coastal States has not been agreed yet. https://www.gov.uk/government/news/uk-agrees-deals-on-mackerel-fishing-with-norway-and-the-faroe-islands.

[49] This situation applies to key commercial stocks to the EU such as Northeast Atlantic mackerel, Atlanto-Scandian herring and blue whiting.

shared fish populations and the ecosystems they live in, and to future-proof fisheries in the face of mounting pressures like climate change (see sections 2 and 4). Larger and more productive fish populations, ultimately allowing for larger overall catches without jeopardising population or ecosystem health, could also help alleviate sharing disputes, as even smaller percentages of the overall catch would correspond to larger absolute quantities than can currently be caught. The EU should therefore exercise its influence in international negotiating fora to push for an explicit investment in larger, healthier shared fish populations, by setting TACs well below the ICES single-stock advice where this does not fully reflect ecosystem needs and dynamics and/or is not geared towards rapid recovery well above sustainable population levels. If the agreed overall fishing limits nevertheless do not fully reflect these aspects, the EU should lead by example and not make the excessive part of its quota share available to its fishers, to promote population and wider ecosystem health in line with its domestic requirements and international commitments.

- **Implement a genuine precautionary approach (as defined by the UNFSA) in agreements on shared stocks**. When the available data and information are uncertain, unreliable, or inadequate, and/or where the available single-stock advice does not yet fully reflect ecosystem needs and dynamics, decision-makers should apply more cautious management that safeguards vulnerable or data-limited stocks and habitats, as a lack of scientific certainty cannot preclude management action.
- **Include provisions regarding abundance of fish populations, limit reference points for mortality, and precautionary and ecosystem considerations in agreements on shared stocks**. We urgently call upon coastal states to conserve biodiversity, minimise the impact of fishing activity on fish populations, sensitive species and on the whole ecosystem, including the seafloor, and use scientific knowledge to inform management decisions.
- **Avoid unilateral processes leading to catches above scientific advice**. Talks on joint management should be comprehensive, including all relevant cooperative coastal states and stakeholders. Where one or more of the relevant coastal states are not part of the relevant discussions, as has recently been the case for Russia, quotas set and catches nevertheless taken by such parties must be factored in in a precautionary way when agreeing catch limits between the other involved coastal states. The United Nations Convention on the Law of the Sea[50] (UNCLOS) determines that collaboration on management must be multilateral when more than two coastal states have a stake in a given fish population, or fishery.
- **Implement the transparency obligations and rights under the Aarhus Convention in the management of shared stocks**. The underpinning scientific advice, management proposals, negotiations, positions of the parties and decisions should be published for public scrutiny, with access guaranteed for all stakeholders.

[50] UNCLOS (1982). United Nations Convention on the Law of the Sea.

- **Apply long-term management as the underlying approach to fisheries management by default**. Although details will need to be revisited regularly, all stakeholders benefit from agreeing to, and working toward, long-term sustainable management objectives. This includes stable sharing arrangements and harvest strategies (including precautionary harvest control rules for setting catch limits). It also requires a robust monitoring and evaluation scheme, control measures and the fight against IUU fishing, a periodic review process, and any necessary mechanisms to transition from previous arrangements to a new system. For certain at-risk species and stocks, immediate emergency measures may be necessary.
- **Use published scientific advice from ICES as the basis for fisheries management decisions made by coastal states**. For additional scientific input explicit standards should be set, ensuring that only the best available, peer-reviewed scientific advice from independent institutions recognised at the international level is used.
- **Contribute to the timely implementation of the bilateral agreements and memoranda of understanding with the main Northeast Atlantic coastal fishing states**. Priority should be given to sustainable management objectives and principles, the precautionary approach and agreeing TACs in accordance with the best available scientific advice by ICES and governed by the MSY objective, as required for example under the EU-UK TCA.
- **Prioritise resolving the allocation issues of pelagic stocks (mackerel, herring, and blue whiting) with the NEAFC Contracting Parties**, and ensure that the overall catches for each stock do not exceed scientific advice, and - where this advice does not fully reflect ecosystem needs and/or dynamics - are kept well enough below the advice to safeguard wider ecosystem health, and in no case lead to unilateral quota increases.
- **Where the EU and the UK fail to reach an agreement on TACs for shared stocks by the 20th of December 2024, provisional unilateral TACs must not exceed the respective party's share of the maximum catch level advised by ICES**, as per Article 499(2) of the TCA. This represents an important safeguard to ensure that stocks are not fished unsustainably where no agreement is reached.

4. Mixed fisheries and ecosystem considerations

Achieving sustainable exploitation of each stock in fisheries targeting multiple species (mixed fisheries) can represent challenges, particularly when dealing with overfished stocks (see section 7 below). Demersal EU fisheries are an illustrative example of this issue with a diversity of species and fisheries subject to numerous biological and technical interactions.

So far, EU management decisions for mixed fisheries have mostly prioritised the exploitation of the most productive and/or economically profitable stocks, at the expense of the most vulnerable populations (often caught as bycatch) or associated species. This approach perpetuates the depletion of vulnerable populations for the sake of avoiding short-term fisheries closures, when the focus should be on rebuilding depleted stocks which would support

thriving fisheries in the long-term without the constant threat of “choking”, thanks to a more resilient, productive ecosystem (also see section 7).

There are multiple measures that can be implemented simultaneously to mitigate these challenges and reduce fishing pressure where necessary. Using a combination of the tools below (Box 4), fishers and managers should be able to reduce the likelihood and mitigate the impact of “choke” situations whilst still fishing within MSY limits. The EU should ensure that all these options are used to their maximum effect, particularly for at-risk species and stocks, both for stocks managed by the EU alone and stocks shared with third countries.

Moreover, the EU must deliver on its legal requirement to apply an ecosystem-based approach to fisheries management. In the context of fishing opportunities, this means that TAC and fishing effort decisions must reflect the ecosystem role of harvested species (both targeted and taken as bycatch), including their relationship to other species in the food web (for example as forage fish for seabirds or marine mammals), and the ecological consequences of target species exploitation. Similarly, additional pressures or stressors impacting on harvested stocks or the ecosystem they live in, such as consequences of climate change and offshore renewables development or other ocean uses, must be factored in when setting fishing limits.

It is the responsibility of the ICES clients such as the EU and the UK to request catch advice that effectively prioritises healthy and productive fish populations and ecosystems in the long-term, by taking full account of climate change, predator needs and other relevant factors.[51] This also applies to the Commission when requesting scientific advice from STECF for the Mediterranean. As already explained in section 2, the current ICES and STECF single-stock advice aims for MSY-based exploitation and is not designed to maximise long-term population and ecosystem health and resilience. For example, following a request from the EU and the UK last year, ICES confirmed that its current single-stock advice for forage fish species like sandeel does not ensure that sufficient biomass is left for predator species that depend on these populations.[52] **While urgently advancing the development of ecosystem science and the full incorporation of relevant ecosystem considerations into the ICES catch advice is crucial, decision-makers must not postpone action until scientists are ready to provide all the answers.**

In line with the fundamental precautionary approach, the EU and its international negotiation partners must therefore set fishing opportunities below the single-stock advice,[53] especially in the face of uncertainty and data limitations and of the ongoing

[51] For further details on how better requests for scientific advice can help accelerate momentum towards ecosystem-based fisheries management, see for example this briefing by the Pew Charitable Trusts (2024): To Improve Fisheries Management and Protect Ecosystems, Decision Makers Must Ask Better Questions. February 2024. https://www.pewtrusts.org/-/media/assets/2024/02/to-improve-fisheries-management-and-protect.pdf.

[52] EU-UK request on ecosystem considerations in the provision of single stock advice for forage fish species. ICES Advice: Technical Services. Report. https://doi.org/10.17895/ices.advice.24638433.v1. For example, this states in the overall conclusion that “*What is not conducted in the assessments is specific analysis of whether the forage fish biomass is kept high enough for specific predator requirements*” (p. 1). Regarding the use of $B_{escapement}$ as a basis for catch advice for example for sandeel and Norway pout, this document makes clear that this is “*not set based on the needs of predators and may or may not be appropriate for ensuring a good provision of ecosystem services*” (sandeel, p. 4) and aims to “*protect recruitment, which may or may not also protect the role as a food source*” (Norway pout, p. 5).

[53] Also see the recent study by Edgar et al. (2024) and the related perspective by Froese & Pauly (2024) published in Science last month, as referenced in footnotes 37 and 38 in section 2 above, which suggest that scientific stock assessments tend to overestimate biomass levels and recovery trajectories particularly for overfished fish populations.

biodiversity and climate crises and other mounting pressures. This will require a decisive move towards a new approach to the setting of fishing opportunities that by default prioritises the rebuilding of all stocks, both EU-only and shared ones, well above sustainable levels, rather than aiming to merely keep them at or near those (often diminished) levels. For example, a recent scientific paper by Kemp *et al.* 2023 concludes that the "*biomass of fish stocks should be allowed to regenerate to a minimum of 120% of that which will achieve MSY to provide a buffer against the uncertainty in ecological response to climate change*".[54] Similarly, an earlier study by Beaugrand et al. 2022 investigating the impacts of fishing pressure and climate-induced environmental change on cod found that "*alleviating fishing effort is the only way to maintain a stable SSB when the environmental regime becomes less suitable*" and that "*preventing collapse is easier than trying to reverse a collapse*".[55] There also needs to be an explicit focus on ensuring a healthy age/size structure,[56] which fishing below F_{MSY} could contribute to and which is a key element of GES under the MSFD[57] and should already have been achieved by 2020. The reasons and benefits of investing in larger stocks with a healthy proportion of larger fish are manifold:

- Such stocks are likely to be more resilient to challenges posed by climate change and other mounting pressures, as well as more productive since larger fish tend to produce more offspring per spawner.
- They can improve carbon efficiency of fishing operations[58] and potentially increase the value or marketability of the catch since a lower amount of fuel and time is needed to catch the same amount of fish compared to a situation where fish are less abundant and smaller.
- Year-to-year fluctuations in stock size may also be more effectively mitigated by larger overall stock sizes, and adopting a habit of not fully exhausting every advised catch increase can buffer future decreases in fishing opportunities if the perception of the stock deteriorates, offering more stability for fishers.
- Overall, it would constitute a key way of future-proofing EU fisheries in the face of climate change and mounting pressures which may negatively impact productivity going forward, for example providing a potential buffer against recruitment failures caused or exacerbated by environmental factors.
- Ultimately, it is an investment into the long-term profitability of the fleet as well as access to sustainable seafood for current and future generations, whereas a continuation of unsustainable fishing levels and practices jeopardises long-term sustainability across all three dimensions referred to in Article 2(1) of the CFP basic regulation (environmental, social, economic).

[54] Kemp, PS, Subbiah, G, Barnes, R, Border, K, O'Leary, BC, Stewart, B, Williams, C (2023). The future of marine fisheries management and conservation in the United Kingdom: Lessons learnt from over 100 years of biased policy. Marine Policy 147 (2023) 105075, https://doi.org/10.1016/j.marpol.2022.105075, p. 1 (abstract).
[55] Beaugrand, G, Balembois, A, Kléparski, L, Kirby, RR (2022). Addressing the dichotomy of fishing and climate in fishery management with the FishClim model. Communications Biology 5, Article number: 1146 (2022). https://doi.org/10.1038/s42003-022-04100-6, pp. 4 and 8.
[56] As also advocated for at the recent event on "More big fish in the sea! Questioning the MSY paradigm for a sustainable long-term marine fisheries management" held by the European Parliament Forum on Recreational Fisheries and Aquatic Environment on 25 April 2023. Event report.
[57] Descriptor 3: "*Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock*." Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive). Annex I.
[58] COM(2023) 303 final. Communication from the Commission to the European Parliament and the Council. Sustainable fishing in the EU: state of play and orientations for 2024. For example, pp. 2 and 6. SWD(2023) 172 final. Commission Staff Working Document accompanying COM(2023) 303 final, for example p. 19.

The EU and third parties fishing shared stocks, such as the UK, must urgently put an end to the irresponsible habit of as a default maxing out on (or even exceeding) the single-stock headline advice provided by ICES and STECF while failing to request them to provide fully ecosystem-based and recovery-focused advice (and then continuing to use the absence of such advice as an excuse to keep defaulting to the single-stock headline advice). Instead, as already outlined in section 2 and Box 2 above, the EU should work with ICES - and STECF in the case of fisheries management in the Mediterranean[59] - and other ICES advice clients like the UK to ensure that future requests for scientific advice on fishing opportunities are explicitly geared towards (1) rapid rebuilding of populations that are below sustainable biomass levels, (2) reaching and maintaining population levels well above B_{MSY} with a healthy age/size structure, and (3) fully accounting for ecosystem needs and dynamics.

In the meantime, while fully ecosystem-based and recovery-focused advice is not yet available, it is the responsibility of the EU and its negotiation partners to urgently develop an approach for incorporating the necessary precaution into the setting of fishing opportunities. As already outlined in section 2 and Box 2, this could involve setting fishing opportunities that are geared towards a certain biomass increase or towards recovering/maintaining stocks at a certain percentage (e.g. 120% or 150%) above existing reference points like MSY $B_{trigger}$. Similar approaches, based on the concept of maximum economic yield (MEY), are already in use for example in Australia.[60] Decision-makers could also by default set TACs no higher than a certain fraction (e.g. 80% or less) of the single-stock ICES headline advice (see Box 2 above), in order to integrate a buffer against climate change and other impacts and ease fishing pressure where ecosystem needs and dynamics are not yet fully reflected in the available ICES advice.

To adequately account for mixed fisheries interactions and ecosystem dynamics, as well as factoring in and mitigating against risks posed by climate change and other pressures, we therefore urge EU decision-makers to follow the recommendations in Box 4 below.

Box 4. Recommendations for TAC-setting in a mixed fisheries and ecosystem context

- **Use mixed fishery MSY considerations provided by ICES** to assess the compatibility of single-stock TACs with the ambition to safeguard the most vulnerable stock(s) caught in the fishery. When seeking mixed fisheries scenarios from ICES, options geared towards the recovery of depleted stocks should be prioritised rather than those focusing on the full exploitation of the more abundant stocks in the fishery.

[59] In the case of the species covered by the West Med MAP, reductions in fishing days are the primary tool to reach the target fishing mortality. However, the link between fishing mortality and fishing days is still unclear. Further research should be carried out to provide robust guidance on the setting of fishing effort restrictions that ensures that target fishing mortality is not exceeded.

[60] Department of Agriculture and Water Resources (2018). Guidelines for the Implementation of the Commonwealth Fisheries Harvest Strategy Policy, Canberra, June. CC BY 4.0, p. 19. "*Some commercial fish stocks around the world are managed to a biomass target that achieves maximum sustainable yield (B_{MSY}). This target maximises the long-term catch that can be taken in a fishery, but ignores the increasing costs of fishing as stocks are fished down to B_{MSY} levels. MEY is generally achieved at a lower catch level (and conversely a higher biomass, B_{MEY}) and aims to maximise the economic returns from fishing rather than maximise the quantity of fish landed*." The guidelines further explain that for stocks for which bioeconomic models, needed to determine MEY-based reference points and targets, are not available or feasible, MEY proxies are used, including for example the proxy of 1.2 * B_{MSY}. This proxy is explicitly geared towards a biomass 20% larger than BMSY.

- **Set TACs for more abundant stocks in mixed fisheries below the ICES single-stock maximum catch advice** to account for mixed fishery interactions, and to ensure that no stocks in the fishery are fished above scientific advice.
- **Adopt spatial measures to reduce fishing pressure on more vulnerable species**, including temporary and permanent closures, real-time closures and 'move-on' rules.
- **Ensure independent, reliable monitoring and full documentation of catches** through Remote Electronic Monitoring (REM) with cameras, supported by observer coverage as appropriate, to better understand catch composition in mixed fisheries and use this to inform further fisheries management.
- **Mandate the use of the best available technology and practices to improve the selectivity of fishing operations**. A list of authorised mitigation measures should be made available for each active mixed fishery to support fishers. Selectivity measures employed during fishing activity should be included within the legal requirement of logbook reporting to track progress and place the burden of proof onto fishers to prove they are doing everything possible to minimise unwanted catches.
- **Ensure that TAC decisions are based on scientific advice that fully incorporates ecosystem considerations, for example regarding predator-prey interactions, commission such advice where these considerations are not yet fully reflected, and - in its absence - explicitly build additional precaution into TAC-setting** (see Box 2 and below). We note the current use by ICES of multispecies modelling to account for food web dynamics in natural mortality values in the assessments of several species. However, there are concerns that this approach does not ensure that a sufficiently large biomass of forage fish (and other fish forming part of the prey of dependent predators) remains in the water or that areas closed to fishing are fully accounted for[61] to allow dependent predators to meet their needs. In light of various political commitments around maintaining food web integrity, conserving seabirds and marine mammals, and in line with the precautionary approach and the ecosystem-based approach, decision-makers should therefore:

  (1) Adopt an ecosystem-based approach to fisheries management by incorporating the needs of marine predators (e.g., seabirds and cetaceans) into the TAC-setting of forage fish (e.g., sprat, herring, sandeel), by setting TACs for such species well below the current single-stock advice from ICES;

  (2) Adjust TAC-setting downwards to account for areas where fishing is no longer permitted (e.g., marine protected areas and relevant sandeel closures) to prevent a concentration of fishing effort into an area smaller than the one which the advice was given

[61] Dunn, E (2021). Revive our Seas: The case for stronger regulation of sandeel fisheries in UK waters. Royal Society for the Protection of Birds. June 2021.

for, while respecting and supporting the UK and Scottish sandeel closures as a key step towards ecosystem-based fisheries management;[62,63] and

(3) Request that ICES explores more ecologically robust alternative reference points, which set safe ecological limits for predators by accounting for not only the fish biomass predators consume (i.e. their physiological requirements) when breeding successfully, but also the much greater biomass they require access to in order to do so (i.e. their ecological requirements).[64,65]

- **Swiftly act on the findings of the ICES response to the EU/UK request regarding the extent to which ICES single-stock advice for forage fish factors in ecosystem considerations, which confirms that this advice does not ensure a sufficient food supply for dependent predators, and that solely relying on quota advice is insufficient to ensure ecosystem-based management and wider ecosystem resilience in line with GES.[66]** This request represents a key step in the right direction, but it will be crucial to ensure that any gaps identified (i.e. occasions where the single-stock advice does not yet fully and robustly account for all relevant ecosystem considerations) are urgently addressed. Recognising that developing or adopting the relevant methodologies may take some time, it is the responsibility of the decision-makers in the meantime to use the currently available scientific advice in a much more precautionary way, for example by setting TACs below the single-stock headline advice where relevant ecosystem considerations are not yet fully reflected (also see section 2 and Box 2). In order to clearly identify such cases, the EU and the UK could request ICES to specify in future on a stock-by-stock basis (for all stocks, not just forage fish species):

  (a) which ecosystem considerations are (likely to be) relevant for each stock;
  (b) to what extent they and any other conservation measures (e.g. area closures) have (not yet) been factored into the advice; and
  (c) what the consequences of a failure to reflect these aspects are likely to be for the stock in question and for the sustainability of the respective headline advice.

  A recent review of the inclusion of ecosystem trends and variability in ICES advice on fishing opportunities by Trenkel *et al.* 2023[67] already presents important findings in this

[62] NGOs on both sides of the English Channel released a joint statement earlier this year in support of the decision to close sandeel fishing in all Scottish waters and English waters of the North Sea. https://rspb.org.uk/media-centre/sandeel-closures-eu-challenge.
[63] It is important to note that an impact assessment report produced in response to a request from DEFRA also highlighted that ICES "*takes no account of area closures when advising on TACs*". Natural England, Cefas and Joint Nature Conservation Committee (JNCC) (2023). What are the ecosystem risks and benefits of full prohibition of industrial Sandeel fishing in the UK waters of the North Sea (ICES Area IV). March 2023. p. 41. https://www.gov.uk/government/publications/evidence-report-on-the-ecosystem-impacts-from-industrial-sandeel-fishing. Similarly, ICES confirmed in its most recent single-stock advice for sandeel that the UK and Scottish area closures were not accounted for in the stock assessment. ICES (2024). Sandeel (Ammodytes spp.) in divisions 4.a–b, Sandeel Area 4 (northern and central North Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.25019657.v1, p. 3. In this and similar situations, ideally ICES could be requested to adjust its advice on fishing opportunities by removing the amount of sandeel (or other species in question) no longer available to fishing due to area closures from its headline advice. If this aspect is not reflected in the ICES advice itself, it will have to be accounted for at the TAC-setting stage in order to prevent concentration of fishing effort into an area smaller than that for which the advice was given.
[64] Hill, SL, Hinke, J, Bertrand, S, Fritz, L, Furness, RW, Ianelli, JN, Murphy, M, Oliveros-Ramos, R, Pichegru, L, Sharp, R, Stillman, RA, Wright, PJ, Ratcliffe, N (2020) Reference points for predators will progress ecosystem-based management of fisheries. Fish and Fisheries. 2020; 00:1–11.
[65] Note for example, that the MSC Fisheries Standard aims to leave up to 75% of the unfished population of "low trophic level" species (such as forage fish like sandeel) in the ocean to meet ecosystem needs, compared to 40% as is typically the case for species managed based on MSY. See Marine Stewardship Council (2023). Clarifying the assessment of key low trophic level stocks.
[66] ICES (2023). EU-UK request on ecosystem considerations in the provision of single stock advice for forage fish species. ICES Advice: Technical Services. Report. https://doi.org/10.17895/ices.advice.24638433.v1.
[67] Trenkel, VM, Ojaveer, H, Miller, DCM, Dickey-Collas, M (2023). The rationale for heterogeneous inclusion of ecosystem trends and variability in ICES fishing opportunities advice. Mar Ecol Prog Ser 704:81-97. https://doi.org/10.3354/meps14227.

regard that such further work should build on. Such information could be provided as part of the single-stock advice by default and support ecosystem-based TAC-setting even where ecosystem considerations are not yet fully incorporated into the advice in a quantitative manner.

- **Set TACs below the single-stock advice where stocks are subject to additional pressures or stressors such as climate-related and other impacts that are not (yet) fully and explicitly factored into the advice**. One option to integrate the necessary precaution in the face of uncertainty or knowledge gaps on ecosystem needs or dynamics into TAC-setting could be, as a minimum, to default to setting TACs below the single-stock ICES headline advice by at least a certain percentage and/or explicitly aim for larger stock sizes than B_{MSY} (or relevant proxies) (see Box 2), while in parallel supporting the incorporation of all relevant ecosystem considerations into ICES advice on sustainable catches going forward (see above).

5. The fishing effort regime in the Western Mediterranean Sea

The western Mediterranean multiannual plan ("West Med MAP")[68] was established in 2019 to safeguard six critical demersal species, ensuring their exploitation levels remain sustainable and conducive to long-term population health. Encompassing 22 stocks of species such as blue and red shrimp, deep-water rose shrimp, giant red shrimp, European hake, Norway lobster, and red mullet, the plan aims to restore and maintain these populations above levels capable of producing MSY. Unlike other multiannual plans within the EU, which adhered to the 2020 deadline mandated by the CFP, the West Med MAP provides a transitional phase until 2024, with 2025 as the target year for sustainable exploitation and beginning of the permanent phase.

While the plan has resulted in a 40% reduction in fishing days from 2020 to 2024, the effectiveness of these measures is hindered by a lack of transparency regarding the "compensation mechanism" that allows Member States to reclaim fishing days.[69] At the moment, no data about the use of the compensation mechanism are easily available or accessible, which raises doubts about the actual quality and effectiveness of the implementation of this tool. Furthermore, the introduction of catch limits in 2022 for both blue and red shrimp as well as giant red shrimp,[70] and caps on longliners' fishing effort in 2021,[71] marked progress, but these steps fall short of the levels recommended by scientific assessments to reach F_{MSY} and of regulating more relevant gears that target critical stocks.

[68] Regulation (EU) 2019/1022 of the European Parliament and of the Council of 20 June 2019 establishing a multiannual plan for the fisheries exploiting demersal stocks in the western Mediterranean Sea and amending Regulation (EU) No 508/2014. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1022. Referred to as "West Med MAP" in this document.
[69] Starting in 2022, policymakers established for the first time a "compensation mechanism" to incentivise Member States to implement technical measures, including selectivity measures, closure areas, and the fixing of minimum conservation reference size (MCRS). Specifically, the three Member States concerned (France, Italy and Spain) are entitled to reclaim a predetermined percentage of allocated fishing days upon satisfying one or more conditions outlined within the annual Council Regulation establishing fishing opportunities for the following year.
[70] Council Regulation (EU) 2022/110 of 27 January 2022 fixing for 2022 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Mediterranean and Black Seas. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022R0110
[71] Council Regulation (EU) 2021/90 of 28 January 2021 fixing for 2021 the fishing opportunities for certain fish stocks and groups of fish stocks applicable in the Mediterranean and Black Seas. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R0090

According to the latest stock assessments published by STECF[72] and the General Fisheries Commission for the Mediterranean (GFCM),[73] fishing mortality remains high, averaging 1.94 times the F_{MSY},[74] and **overfishing still affects 57% of the fish populations managed by the West Med MAP**.[75] Even more concerning, **the biomass of 85% of the fish populations does not meet the West Med MAP's objective.** Particularly, 46% of the stocks are in a critical state of overexploitation (biomass below $0.5*B_{MSY}$) and 39% are overexploited (biomass between $0.5*B_{MSY}$ and B_{MSY}).[76] **Seven stocks have abundance levels below B_{pa}, with three of these also falling below B_{lim}.[77]** The current fishing mortality rates and biomass levels indicate that more decisive action is urgently needed to prevent further depletion of these fish populations.

To address the ongoing crisis in the Western Mediterranean, **we urge the European Commission, alongside the governments of France, Italy and Spain, to take immediate and robust measures**. These actions are crucial not only for the recovery of the fish populations managed under the West Med MAP but also for the long-term sustainability of the region's marine ecosystems.

Box 5. Recommendations regarding fisheries management in the Western Mediterranean Sea

- **Strengthen efforts to reduce fishing mortality.** Ongoing measures like restrictions on fishing days, catch limits, and improvements in selectivity are essential to reduce fishing mortality to sustainable levels. It is crucial to continue these efforts, ensuring that fishing mortality is brought at least within MSY ranges by the 2025 deadline, particularly for stocks that are currently subject to overfishing.

- **Implement safeguard measures for stocks below B_{lim} and B_{pa}.** Given the critical condition of several stocks, especially those with biomass below B_{lim}, urgent action is necessary to prevent irreversible damage, and required by Article 6 of the West Med MAP. Specifically, emergency measures must be implemented without delay for stocks below B_{lim}, while remedial actions are mandated for stocks below B_{pa} starting in 2025.

- **Adopt tailored management approaches.** Management measures should be tailored to specific geographical subareas (GSAs) and fish stocks. For example, dividing management of certain species like European hake by GSAs or small groups of GSAs could enhance the effectiveness of these measures and better align them with the MAP's objectives.

[72] Scientific, Technical and Economic Committee for Fisheries. (2023). Stock assessments in the Western Mediterranean Sea (STECF 23-09). Mannini, A., Ligas, A., & Pierucci, A. (Eds). Publications Office of the European Union. p. 125. https://data.europa.eu/doi/10.2760/995295.
[73] General Fisheries Commission for the Mediterranean. (n.d.). Validated stock assessment forms (SAFs). Retrieved July 07, 2024 from: https://www.fao.org/gfcm/data/safs/en/
[74] Guadagnoli, G. and López, J. (2024). Rebuilding western Mediterranean fisheries: has the western Mediterranean multiannual plan delivered? 2019–2024. Oceana. p. 21. https://europe.oceana.org/reports/rebuilding-western-mediterranean-fisheries-has-the-western-mediterranean-multiannual-plan-delivered-2019-2024/
[75] *Ibid.*, p. 13.
[76] *Ibid.*, pp. 17-18.
[77] Blue and red shrimp in GFCM geographical subareas (GSAs) 5, blue and red shrimp in GSAs 6-7, red mullet in GSA 1, and red mullet in GSA 6 are below B_{pa} European hake in GSAs 1-5-6-7, European hake in GSAs 8-9-10-11, along with Norway lobster in GSA 6 are below both B_{pa} and $\mathbf{B_{lim}}$.

- **Incorporate additional gears and catch limits.** The inclusion of additional fishing gears, such as gillnets, under the West Med MAP is critical, especially where they contribute significantly to high fishing mortality. Introducing maximum allowable fishing effort or catch limits for these gears, and adjusting existing catch limits to align with scientific advice, can further control fishing mortality.

- **Enhance selectivity measures.** There is a need for better-designed technical measures, particularly within the compensation mechanism, to ensure they effectively reduce juvenile bycatch and prevent overfishing. Improved selectivity measures, in line with the adjusted minimum conservation reference size for key species, are essential to protect vulnerable stocks.

- **Expand and assess closure areas.** Additional spatial protections are necessary to reduce fishing on juvenile and spawning grounds. Existing closures should be regularly assessed, and new closures should be established based on scientific data. It is also important to ensure that closures effectively reduce fishing pressure rather than merely displace it.

- **Ensure that a comprehensive and effective control system is in place for Member States to ensure compliance with the entire West Med MAP, including all tools designed in the plan, such as fishing effort restrictions and technical measures.** This system should also monitor the compensation mechanism, which was not part of the original MAP provisions, ensuring that vessels failing to comply with required closures or selectivity measures, through which they obtained additional fishing days, lose these extra days in the following year and repay any granted compensation. Additionally, regular monitoring of all fleets covered by the MAP is essential to ensure consistency between actual and declared fishing days, deterring illegal, unreported, and unregulated (IUU) fishing activities. The Commission and Member States should prioritise investments in technology and capacity building to enhance surveillance and enforcement capabilities.

- **Work with STECF to move towards fully ecosystem-based and recovery-focused scientific advice on fishing mortality and catches**,[78] as well as incorporating the necessary precaution in the face of uncertainty and knowledge gaps about ecosystem integrity and dynamics.

- **Ensure alignment with EU environmental legislation.** Management measures under the West Med MAP must be coherent with broader EU environmental objectives, particularly the goal of achieving GES. This alignment is essential for the long-term health and sustainability of marine ecosystems.

[78] In the case of the species covered by the West Med MAP, reductions in fishing days are the primary tool to reach the target fishing mortality. However, the link between fishing mortality and fishing days is still unclear. Further research should be carried out to provide robust guidance on the setting of fishing effort restrictions that ensures that target fishing mortality is not exceeded.

6. Landing obligation challenges

Since the LO came fully into force in 2019, TACs have been set based on total catch advice (albeit with some deductions for exempted discards), rather than the landings advice used before 2015. Despite the European Commission's efforts, it is broadly recognised that non-compliance across Member States is widespread, unreported discarding continues and the LO is not effectively controlled and enforced.[79] In this context, we are extremely concerned about the Commission's recent decision to silently drop the pending infringement proceedings against several EU Member States for a failure to enforce the landing obligation.[80] Setting TACs based on catch advice rather than landings advice, while illegal discarding continues, allows for unsustainable catches potentially far beyond scientific advice.[81] Poor implementation of the LO fundamentally undermines sustainable fisheries in the EU and decisive steps must be taken to remedy the current situation.

Furthermore, there are industry voices who claim that failures of implementation mean that the policy is unworkable, and that a reform of the CFP should eliminate the LO. The shared NGO position is that the LO has not been given a chance to work and that the underlying problems (such as a lack of fishing gear selectivity and effective avoidance of unwanted catches) can and must be tackled under the existing framework. To avoid negative effects of the failure to properly implement the LO on the setting of sustainable catch limits we make the following recommendations in Box 6 below.

Box 6. Recommendations regarding TAC-setting in the context of the LO

- **Underpin sustainable TAC-setting by robust controls and full catch documentation using remote electronic and camera monitoring**. REM has become a vital and irreplaceable tool that is increasingly being implemented in fisheries around the world. The swift roll-out of REM across EU waters is key to ensuring that catches are fully documented and accounted for, and that management measures (including TACs) are complied with.[82]
- **In the absence of robust, comprehensive control and monitoring, factor in poor compliance with the LO by proposing and setting TACs lower than the ICES maximum catch advice**, to ensure that the agreed TACs do not lead to fishing mortality beyond sustainable levels. So-called quota "top-ups", intended to cover catches that used to be discarded prior to the LO and now have to be landed, should not be applied while the LO is not effectively monitored and controlled. If such top-ups nevertheless continue to be used, then TAC deductions need to be made in order to account for continued discards covered by LO exemptions. Such deductions need to be based on robust discard estimates, and where discard information is limited or uncertain, larger deductions must be applied in line with the precautionary approach.

[79] Communication from the Commission to the European Parliament and the Council (2022). COM(2022) 253 final. Towards more sustainable fishing in the EU: state of play and orientations for 2023. Commission Staff Working Document SWD(2022) 157 final.
[80] Mosola, D (2024). Brussels abandons crackdown on overfishing. Financial Times, 26 July 2024. https://www.ft.com/content/92f54b80-24b7-4b57-80f6-a2eadd2a8211.
[81] Borges, L (2020). The Unintended Impact of the European Discard Ban. ICES Journal of Marine Science. Also see: ClientEarth's and Our Fish's briefings on the LO. This short 5 min presentation (starting at 15:30) visualises the risk that 'topped up' catch-based TACs pose in combination with illegal discards.
[82] https://marine-conservation-society-production.s3.amazonaws.com/documents/REM_TransparentSea_Final_v2.pdf.

- **Make access to quota "top-ups" conditional on demonstrated vessel compliance with the LO and full catch documentation**, notably through REM, supported by independent observer coverage as appropriate. Such top-ups were intended to allow fishers to legally land catches that would have been discarded prior to the LO, and therefore must not be made available to vessels that are not demonstrably complying with the LO.
- **Create and promote quota redistribution solutions**, beyond traditional swaps, to avoid closing fisheries if quota is available elsewhere.

7. Depleted stocks with zero or very low catch advice

The most recent scientific advice published by ICES highlights the continued severely depleted status of a number of key fish populations, many of which are jointly managed with the UK. Examples include Celtic Sea and Irish Sea cod and whiting, herring in the Irish Sea, Celtic Sea and southwest of Ireland, Celtic Sea pollack, and as of this year also eastern Channel common sole.[83] All of these stocks are below the biomass limit reference point (B_{lim}), and for all of them except sole the ICES advice is for zero catch. With climate change also likely to be affecting the resilience of some fish populations,[84] effective efforts to recover these stocks are needed more urgently than ever.[85]

We are extremely concerned that limited effort has been made by all parties involved to apply effective recovery measures while TACs continue to exceed scientific advice. As already outlined in section 2, regardless of the CJEU ruling on the Council's discretion regarding the setting of fishing opportunities for bycatch stocks in relation to the CFP's 2020 MSY deadline, both the EU and UK remain legally obliged under their respective domestic legislation to restore and maintain all populations of harvested species above biomass levels capable of producing the MSY and to minimise negative impacts on marine ecosystems. Moreover, these stocks are a public resource and recovering them is a necessity to contribute to a healthy resilient marine ecosystem and to provide long-term benefits to dependent coastal communities.

It is high time to break the vicious cycle of overfishing already depleted "bycatch" stocks in order to avoid short-term fisheries closures or quota cuts, thereby preventing stock recovery and trapping fisheries in a suboptimal situation, perpetually overshadowed by choke risks. The fact that most depleted fish populations have been in a dire state for many years and in some cases are now at or near the all-time low, is undeniable proof that this approach has failed to rebuild struggling stocks, and repeating it year after year but expecting different results has no rhyme or reason. Instead, the EU and its negotiating partners like the UK must now urgently prioritise recovery of all stocks that are below sustainable levels, by setting TACs accordingly and developing effective rebuilding plans and measures.

[83] ICES advice for the referred depleted stocks: Celtic Sea cod, Celtic Sea whiting, Irish Sea cod, Irish Sea whiting, herring in the Irish Sea, Celtic Sea and southwest of Ireland, Celtic Sea pollack, eastern Channel common sole.
[84] Drinkwater, KF (2005). The response of Atlantic cod (*Gadus morhua*) to future climate change. ICES Journal of Marine Science, Volume 62, Issue 7, 2005, Pages 1327–1337. https://doi.org/10.1016/j.icesjms.2005.05.015.
[85] Sumaila, UR and Tai, TC (2020). End Overfishing and Increase the Resilience of the Ocean to Climate Change. Frontiers in Marine Science. https://doi.org/10.3389/fmars.2020.00523.

As already highlighted in section 2, the findings recently published in Science,[86] that current scientific stock assessments tend to overestimate productivity and recovery trajectory, further underpin the need for additional caution if population rebuilding efforts are to be successful. Relying on so-called "phantom recoveries" that in hindsight, based on more recent information, turn out not to have materialised,[87] risks perpetuating or exacerbating an already precarious situation. More explicitly, as Froese & Pauly (2024) put it, "*managers need to be aware of the difficulties of predicting the status of an invisible resource and should apply their common sense when repeatedly confronted with phantom recoveries of a depleted resource*."[88]

Managing mixed fisheries involving stocks subject to zero or very low catch advice presents a number of challenges. However, there are steps that can be taken to reduce unwanted catches, minimise the impacts of fishing on depleted stocks and prioritise their rapid recovery. With specific regard to low or zero catch advice stocks, we provide the following recommendations in Box 7 below, complementing those presented in Box 4 above regarding mixed fisheries.

Box 7. Recommendations regarding depleted stocks with zero or low catch advice

- **Request ICES to provide advice geared towards rapid rebuilding of all stocks that are below MSY $B_{trigger}$,** to support the setting of future catch limits at or below levels that aim for recovery within no more than twice the time needed for recovery in the absence of fishing (T_{MAX}/T_{MIN} <= 2, as suggested by ICES WKREBUILD2).[89] Where such bespoke rebuilding-focused advice is not yet available and the EU and/or its negotiating partners are, as in previous years, considering the use of bycatch TACs despite zero or very low catch advice from ICES, they could at least aim for a minimum increase in biomass to be defined based on the specific stock situation and available catch options and their corresponding biomass projections.[90] See Box 2.
- **Follow the scientific advice provided by ICES and set catch limits for depleted stocks accordingly**. The EU should prioritise the recovery of depleted stocks over short term profit maximisation, as this is in the long-term interest of both the marine environment and coastal communities.
- **Prioritise the recovery of depleted stocks particularly in cases where "bycatch TACs" are adopted**, and do not allow catches unless and until the relevant management authority has put in place an effective rebuilding plan or a multi-year management strategy with clear recovery targets, timeframes and bycatch reduction strategies,

[86] See the recent study by Edgar et al. (2024) and the related perspective by Froese & Pauly (2024) published in Science last month, as referenced in footnotes 37 and 38 in section 2 above.
[87] *Ibid*., for example, Froese & Pauly (2024) stated that "*rising trends in biomass reported for overfished stocks were often inaccurate, resulting in so-called phantom recoveries for stocks where actual biomass was fluctuating at a low amount or even declining. In other words, overfished stocks that were in urgent need of catch reduction and rebuilding were instead displayed by models as increasing in biomass. [...] On the basis of these data, fishery managers could reasonably conclude, albeit incorrectly, that the stock was recovering and able to support even higher catch levels*."
[88] *Ibid.*
[89] ICES (2023). Workshop on guidelines and methods for the design and evaluation of rebuilding plans for category 1-2 stocks (WKREBUILD2). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.24763293.v2.
[90] In the absence of ICES advice that is explicitly geared towards stock rebuilding over a particular timeframe, the EU and UK negotiation teams could review the available catch options in the ICES single-stock advice sheet, and for example base TACs on the scenario corresponding or closest to the mid-point between the biomass increase projected for zero catch and that for $F_{MSY\ lower}$ or $F_{MSY\ lower}$ × SSB 2025/MSY $B_{trigger}$, or set them halfway between the corresponding catch options.

including spatial measures (such as temporary and permanent closures) and selective gears, to achieve them. Such rebuilding plans and remedial measures (reflecting the findings of ICES WKREBUILD2)[91] should be implemented for all populations below MSY $B_{trigger}$, include strong safeguards to prevent future population declines or stagnation below MSY $B_{trigger}$, and be subject to close monitoring and enforcement using REM with cameras.

- **Ensure that fisheries using "bycatch TACs" are fully documented using REM** (supported by observer coverage as appropriate), and strong remedial measures are in place. This is particularly crucial in light of long-standing concerns about the lack of compliance with the LO, as well as indications in the ICES advice for several depleted or struggling stocks that the relevant TACs have regularly been overshot in the past (e.g. for North Sea cod).
- **Prioritise the recovery needs of these stocks in management measures for mixed fisheries** by ensuring that catches under no circumstances exceed the scientific advice, rather than allowing the full exploitation of the possible fishing opportunities of healthy stocks in the same fishery.[92] As highlighted in Box 4, this means setting TACs for the more abundant stocks caught in the same fisheries (such as Norway lobster in the Irish Sea or haddock in the Celtic Sea) below their single-stock advice in order to safeguard depleted stocks (such as Irish Sea and Celtic Sea whiting and cod).
- **Request ICES to provide additional mixed fisheries scientific catch scenarios focusing on options which allow vulnerable stocks to rebuild** to inform fisheries management of the actions and/or reductions in TACs for healthy stocks which would be required. Evaluation of such scenarios could present options which avoid immediate fisheries closures while still allowing depleted stocks to recover within an ambitious timeframe.

8. Stocks not managed by a TAC[93]

A few stocks which are currently not subject to a TAC have been exploited unsustainably for several years. Examples include the critically endangered European eel, European sea bass in the North Sea, Irish Sea, English Channel, Bristol Channel and Celtic Sea and sardine in the Cantabrian Sea and Iberian Atlantic waters. In addition, very few effective management options have been explored for minimising bycatch of vulnerable and critically endangered species like tope shark (*Galeorhinus galeus*).

The MSY objective in Article 2(2) of the CFP Basic Regulation applies to all harvested stocks, whether subject to a TAC or not. Likewise, both the precautionary approach and the ecosystem-based approach are fundamental principles that must underpin fisheries management under the

[91] ICES (2023). Workshop on guidelines and methods for the design and evaluation of rebuilding plans for category 1-2 stocks (WKREBUILD2). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.24763293.v2.
[92] ClientEarth (2020). Ask the right question, get the right answer: Scientific advice for bycatch or non-targeted stocks that have zero catch advice
[93] For specific recommendations on fisheries management in the Western Mediterranean, where reductions in fishing days are the primary tool to reach the target fishing mortality for stocks under the West Med MAP, please see section 5 and Box 5 of this document.

CFP in general. It is crucial that effective stock-specific measures be introduced, particularly where no TAC is in place to regulate fishing levels, to ensure that vulnerable stocks are restored above sustainable levels, in line with legal requirements. The fact that we know very little about the true catch levels of some of these species further strengthens the case for REM to improve data for their sustainable management. We therefore provide the following recommendations in Box 8 below for stocks not managed by a TAC.

Box 8. Recommendations for stocks not managed by a TAC

- **Introduce effective management measures for all non-TAC stocks** that aim to ensure each stock's recovery and sustainable exploitation in line with the CFP's objectives, for example through recovery plans. In any cases where TACs have been removed and not reinstated, a quantitative evaluation of potential alternative management measures and their efficiency should be urgently conducted, as recommended by ICES for several deep-sea stocks in 2018,[94] to ensure the CFP's objectives are met for the affected stocks. Management of non-TAC stocks should also be underpinned by REM to provide robust data on capture of these species.
- **Assess and minimise the impact of fisheries for stocks subject to TACs on non-quota species and other marine life**. For example, high numbers of dab are caught in the plaice and sole fishery in the North Sea, but mostly discarded, with a discard rate of 90%.[95] This should be addressed by setting TACs for the relevant target stocks at lower levels and implementing effective bycatch reduction measures to minimise the impact on associated non-quota stocks.
- **Ensure that the prohibited species list in the TAC and quota regulation has clear criteria for uplisting and removal of species.** There is a clear need for transparent criteria for the listing of prohibited species to ensure that species that are in need of protection can be listed and species that have recovered can be sustainably exploited again.[96]
- **Ensure a continued and swift recovery of sea bass:** Given that the spawning stock biomass is still below MSY $B_{trigger}$ and B_{pa} (i.e. outside safe biological limits) and projected to increase only marginally based on ICES headline advice,[97] catches should be limited to well below the headline advice to allow for a continued recovery of the stock. To achieve this:
    - **There should be no increase in catch limits for 2025, in order to allow growth to get back on track.** The flawed ICES Advice Rule (see section 2 for

[94] ICES (2018): EU request for ICES to provide advice on a revision of the contribution of TACs to fisheries management and stock conservation for selected deep-water stocks. ICES Advice: Special Requests. Report. https://doi.org/10.17895/ices.pub.4493.
[95] ICES (2023). Dab (Limanda limanda) in Subarea 4 and Division 3.a (North Sea, Skagerrak and Kattegat). Replacing advice provided in 2022. ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.22793633.v1. Table 1, p. 2.
[96] Scientific, Technical and Economic Committee for Fisheries (STECF) – 71 st Plenary report (STECF-PLEN-22-03). Publications Office of the European Union, Luxembourg, 2023, doi:10.2760/016673, JRC132078. On p. 9, "*STECF concludes that there is currently no transparent decision-making procedure on which to include or exclude species from the prohibited species list.*."
[97] ICES (2023). Sea bass (Dicentrarchus labrax) in divisions 4.b–c, 7.a, and 7.d–h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel, and Celtic Sea). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.21840747.v1.

more details) and anomalous 2020 and 2021 pre-recruitment assumptions have resulted in an unsafe headline catch advice that jeopardises the stock recovery - growth is stalled and yet the ICES advice suggests an unsustainable 14% increase in fishing pressure.

    - **Bycatch must be reduced.** In 2023, bycatch metiers represented 65% of all commercial bass landings - this is a barrier to stock recovery.
    - **ICES should be requested to deliver the sea bass catch allocation tool in time to be used for setting 2026 fishing opportunities**.

- **Add European eel to the prohibited species list, stop all targeted fishing for eel, both commercial and recreational, and urgently introduce measures that address habitat loss and water quality in priority areas**. European eel is a shared stock with the UK and other countries and is subject to targeted fishing in both the EU and many other countries, despite being listed as Critically Endangered by the International Union for Conservation of Nature (IUCN).[98] The most recent scientific advice from ICES on fishing opportunities for eel,[99] provided to both the EU and the UK, is zero catch of all life stages and in all habitats, including eels used for restocking and aquaculture. It also includes advice to bring all other anthropogenic mortalities to zero and to urgently restore habitats ensuring connectivity and water quality to support recovery of the population.

9. Deep-sea stocks

Scientists indicate that deep-sea fish populations in European waters are either depleted or lacking information to assess their status. Deep-sea fish tend to be slow-growing, late maturing and long-lived. The biological characteristics of most deep-sea species and the ecosystems they inhabit make them exceptionally vulnerable to over-exploitation and poorly adapted to sustained fishing pressure, whether targeted or not, since their productivity and recovery capacity are very limited. Deep-sea habitats themselves, including vulnerable marine ecosystems (VMEs), are highly susceptible to damage from deep-sea fishing - damage that can take centuries to recover from. Given these characteristics, deep-sea species and ecosystems should be managed with significant precaution, instead of being treated as by-products of target fisheries for other stocks and/or jeopardised as collateral damage. In this regard, much more needs to be done to protect deep-sea habitats to meet the obligations under the EU deep-sea fisheries Regulation 2016/2336.

Fisheries ministers have repeatedly set fishing opportunities above the precautionary advice provided by ICES and STECF, or even removed TACs for many of these vulnerable stocks, without successful efforts to date to fill the data gaps that still prevent full MSY-based stock assessments for many deep-sea species. This is contrary to the CFP's sustainability requirements, including the precautionary approach, which requires more caution when data are

[98] Pike, C, Crook, V, Gollock, M (2020). Anguilla anguilla. The IUCN Red List of Threatened Species 2020: e.T60344A152845178. https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T60344A152845178.en.
[99] ICES (2023). European eel (Anguilla anguilla) throughout its natural range. ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.21907860.v1.

lacking or uncertain, and the ecosystem-based approach of minimising negative impacts of fishing activities on the marine ecosystem.

It also fails to deliver on the EU's international commitments to manage deep-sea fisheries in a manner consistent with the global standard established by the United Nations General Assembly (UNGA).[100] This standard requires EU regulations to contain, amongst other things, obligations to: end overfishing of deep-sea species; rebuild depleted stocks; prevent by-catch of vulnerable species; to take into account the potential impacts of climate change and ocean acidification in taking measures to manage deep-sea fisheries and protect VMEs; and to protect VMEs, including all species associated with VMEs, from the adverse impacts of bottom fisheries whether they target deep-sea species or take them as bycatch.

Box 9. Recommendations for deep-sea stocks

Many of the recommendations covered in more detail throughout Boxes 2 to 8 in this document directly apply to deep-sea stocks, particularly regarding the following:

- The setting of fishing opportunities below the ICES and STECF scientific single-stock advice where this does not yet fully reflect ecosystem needs and dynamics and/or is not explicitly geared towards rapid recovery above sustainable population levels;
- The application of the precautionary approach and the ecosystem-based approach to fisheries management and the need to prioritise the protection and recovery of vulnerable and/or depleted stocks;
- The concerns around potential TAC removal or freezing of fishing effort and the need for the implementation and evaluation of effective recovery measures to ensure the CFP's objectives are met; and
- The need to urgently improve data collection and address current data gaps in order to enable the definition of MSY reference points or suitable proxies (to support rebuilding above levels which can produce MSY as required by the UN Fish Stocks Agreement) for the stocks concerned.

In addition to the above, recognising the particular vulnerability of deep-sea species and ecosystems, we recommend that the EU:

- Ensures the effective enforcement of the Implementing Regulation (EU) 2022/1614 establishing a list of areas closures where VMEs are known or likely to occur; as well as the effective implementation of the EU deep-sea fisheries Regulation (EU) 2016/2336;[101]
- Ensures that the Commission and Member States conduct the next review of the list of areas where VMEs are known to occur or are likely to occur, as soon as possible as required by the EU deep-sea fishing Regulation, and implement comprehensive protection of VMEs in EU waters, including seamounts;[102]

[100] Resolutions 61/105, 64/72 , 66/68, 71/123 and 77/118 adopted by the General Assembly of the United Nations.
[101] Regulation (EU) 2016/2336 of 14 December 2016 establishing specific conditions for fishing for deep-sea stocks in the north-east Atlantic and provisions for fishing in international waters of the north-east Atlantic and repealing Council Regulation (EC) No 2347/2002. https://oceans-and-fisheries.ec.europa.eu/news/fisheries-eu-moves-one-step-closer-protecting-deep-sea-ecosystems-bottom-fishing-its-waters-2022-06-28_en
[102] ICES Advice on areas where Vulnerable Marine Ecosystems (VMEs) are known to occur or are likely to occur in EU waters, April 2023

- Sets zero TACs for deep-sea species that are recognised as vulnerable, threatened or endangered, such as roundnose grenadier which is listed as Critically Endangered in the North Atlantic on the IUCN Red List; and
- Sets bycatch quotas at zero for any deep-sea species recognised as vulnerable, threatened or endangered, and implements effective mandatory bycatch mitigation measures for deep-sea sharks that are on the prohibited species list.

Environmental organisations remain committed to the objectives of the Common Fisheries Policy. We will continue to scrutinise the progress in ending overfishing and boosting long-term population and ecosystem health and resilience as we urge the European Commission, the Council of the EU and the Member States to fully implement the CFP and finally deliver the EU's transition to truly sustainable fisheries.

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