Caution! A TAC-Setter’s Guide to the ‘Precautionary Approach’

Fisheries management under the Common Fisheries Policy (CFP) of the European Union (EU) has to follow the ‘precautionary approach’. This means that uncertainty or a lack of knowledge or data cannot justify delaying or failing to take action to conserve fish stocks and the ecosystems they depend on. Decision-makers need to be more, not less, cautious when information is more limited. Just like a driver whose speedometer is broken or who is unsure about the speed limit but who cannot get off the road – she must drive more slowly.

However, different people involved in the CFP use the term ‘precautionary’ in different contexts – and not always in the sense set out above. To put it simply, some people seem to think a broken speedometer or an uncertain speed limit means we should drive faster than we would if everything was ok.

They are wrong. And they are putting jobs and nature at risk. These different understandings undermine the meaning and purpose of the ‘precautionary approach to fisheries management’. This lack of clarity leads to unsustainable decision-making, such as setting Total Allowable Catches (TACs) higher than they should be.

This document is designed to help people involved in the TAC-setting process get it right. Those people are mainly in the European Commission – which proposes TACs – and the Council of the EU, which consists of representatives of EU Member States. What follows is an overview of different uses of the term ‘precautionary’ and how it should (or should not) be interpreted or used in relation to EU fisheries management, including:

- The precautionary approach to fisheries management according to the CFP;
- The International Council for the Exploration of the Sea (ICES) precautionary approach; and
- Precautionary (PA) reference points.

It also provides examples of how these concepts may be misconstrued or misused, and offers guidance as to what ‘applying the precautionary approach’ means in terms of TAC-setting.
The Precautionary Approach under the CFP

Anyone involved in TAC-setting needs to keep three key provisions of the CFP in mind:

- the requirement to apply the precautionary approach to fisheries management;¹
- the fundamental objective of keeping fishing stocks above levels which can produce the ‘maximum sustainable yield’ (MSY);² and
- the requirement to establish measures in accordance with the best available scientific advice.³

Under EU law, the precautionary approach to fisheries management ‘means an approach according to which the absence of adequate scientific information should not justify postponing or failing to take management measures to conserve target species, associated or dependent species and non-target species and their environment’.⁴ This comes from international law (the United Nations (UN) Fish Stocks Agreement,⁵ to which the EU is a Contracting Party) and also implements obligations found in the EU’s treaties.⁶ So getting this wrong means breaking the law.

In order to implement the precautionary approach, the UN Fish Stocks Agreement includes several requirements to:

- ‘be more cautious when information is uncertain, unreliable or inadequate’;⁷
- set ‘reference points’ (against which the state of stocks and their exploitation level can be assessed) based on the best available scientific information, and actions to be taken if those reference points are transgressed;⁸
- take into account a wide range of uncertainties;⁹ and
- ‘take measures to ensure that, when reference points are approached, they will not be exceeded’ and, if they are exceeded, to act ‘without delay’ to restore the stocks.¹⁰

The ICES precautionary approach

ICES is the source of the best available scientific advice for TAC-setting in the EU.¹¹ They have developed a framework to translate the legal requirements into concrete scientific catch advice figures.¹² ICES’ approach depends on a) the knowledge and data that exist for the stock in question, and b) whether a precautionary management plan or strategy has been agreed (for example between the EU and third countries).

For each stock, ICES comes up with advice based on delivering the MSY, where there is enough information. If data are limited, their advice is based on the precautionary approach. Put simply, MSY-based advice tells us how to fish sustainably when we know what is going on. Precautionary advice is the

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² Ibid.
³ Ibid., Article 3(c).
⁴ Ibid., Article 4(8).
⁶ See Treaty on the Functioning of the European Union, Article 191(2): “Union policy on the environment shall aim at a high level of protection…. It shall be based on the precautionary principle and on the principles that preventive action should be taken…”. Charter of Fundamental Rights of the European Union, Article 37: “A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development”.
⁷ Ibid., Article 6(2).
⁸ Ibid., Article 6(3)(b).
⁹ Ibid., Article 6(3)(c)(i) including about the size, condition and productivity of the stocks, reference points, the level and impact of fishing on target and other species, as well as current and future oceanic, environmental and socio-economic conditions.
¹⁰ Ibid., Article 6(4).
scientists’ best attempt to help us steer clear of what is most likely an unsustainable situation, while we do not know yet what the current situation actually is.

Having the MSY advice is better – like having a fully working speedometer and having just crossed the border into Belgium, greeted by a big sign announcing the speed limit. Unfortunately, for many stocks data are too limited to allow for a full MSY-based stock assessment. For these stocks, it is like we are driving with nothing more than a wristwatch counting the seconds and a sense, more or less, that each strip on the road is one metre long. The precautionary advice is like someone saying “Don’t go more than 50 strips a minute”. It is not a desirable way to navigate. What you really need to do is slow down or even get off the road and, if you can, get your car fixed and/or find out what the speed limit is.

As ICES puts it, ‘as information becomes increasingly limited, more conservative reference points should be used’, and more generally, the less we know, the more cautious we should be. The worse your speedometer or the less you know about the speed limit, the slower you go. As a starting point, and in the absence of an indication from decision-makers about how much risk they are willing to take, ICES applies:

- an ‘uncertainty cap’, limiting any change on previous advice (or, if it is the first year of advice, to the average of recent catches) to plus or minus 20%, and
- an additional precautionary margin of 20% when it is likely that currently the stock is being fished unsustainably (i.e. above MSY) or when the state of the stock or its exploitation level compared with reference points is unknown.

The resulting catch advice provided by ICES for data-limited stocks represents the ‘best available scientific advice’ for those stocks in line with the CFP’s precautionary approach (click here for more on best available scientific advice and here for biological reference points).13

How (not) to implement the CFP’s precautionary approach

So far we have covered two directly linked types of “precautionary approach”:

- **The CFP’s precautionary approach** requires being more cautious in the absence of knowledge.
- **ICES’s precautionary approach** is essentially a translation of this concept into concrete scientific catch advice figures, using the limited information available.

However, there is a third term that sounds similar, but isn’t quite the same: the ‘precautionary’ (or ‘PA’) biological reference points scientists use to assess whether a stock is within or outside ‘safe biological limits’. There are two PA points – one for fishing pressure, and another for stock size. A stock is outside ‘safe biological limits’ when one or both of the PA reference points have been transgressed (fishing pressure is too high and/or stock size too low). Such stocks have a higher risk of impaired reproduction. This means they are not only less resilient and less productive than a larger stock that can produce the MSY, but also more likely to collapse - clearly not a desirable situation.

So, whereas the CFP’s and ICES’s ‘precautionary approaches’ are about how to behave when the situation is unknown or uncertain, ‘precautionary’ PA reference points are like warning signs that tell you to stay

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13 Ibid., p. 12.
14 Ibid.
clear of a situation that you know is bad. Similar to the red zone on your car’s dashboard when you are running out of fuel.

Usually, when ICES provides MSY-based advice, they also include a list of other catch scenarios. These are not the official advice to be followed, but indicate what is likely to happen to the stock if you fish at a particular level. These scenarios often include a catch option based on the PA reference points. Importantly, advice based on PA reference points (meaning lower stock size, higher fishing pressure) usually allows for a bigger catch than advice based on MSY reference points (meaning larger stock size, lower fishing pressure). This is because advice based on PA reference points is designed merely to keep the stock within safe biological limits – whereas advice based on MSY reference points is designed towards allowing the stock to be at its most productive level.

This is where some decision-makers are going wrong. They fall for the temptation of a bigger TAC based on PA reference points, even though MSY-based advice (meaning a smaller TAC) is available. Indeed, TAC-setters in the EU sometimes go back to ICES and ask for PA advice even though they have MSY advice. This way they deliberately disregard what they know would be sustainable (MSY-based advice), and instead go for a catch option they know will keep the stock at a lower and less productive level, closer to the danger zone. This is like deliberately shooting past the petrol station when your fuel gauge is approaching the red zone, in the hope of getting home faster, even though you are not sure you have enough fuel to make it there.

In summary, there are two scenarios TAC-setters might find themselves in:

- They have MSY advice and additional catch scenarios, for example based on PA reference points (based on knowing what fishing level would (not) be sustainable or pose a risk to the stock); or
- They just have precautionary advice based on the ICES precautionary approach (where the situation of the stock and/or its exploitation is unknown or uncertain).

In the first scenario, if there is MSY advice, following the catch scenario based on PA reference points instead is like ignoring your working speedometer and the road signs. It is just plain wrong. It flies in the face of the CFP’s precautionary approach, which is about being more cautious when you know less – not about ignoring what you do know so that you can catch more fish.

The second scenario is where there is only precautionary advice. In this case, allowing fishing above this advice – which in the absence of robust knowledge of the state of the stock and its exploitation is the best available scientific advice – also flies in the face of the CFP’s precautionary approach. Your speedometer is broken. You do not know the speed limit. Now is the time to get off the road, or, if you absolute must stay on it, put on your flashing lights, slow down, and try to make things better as quickly as possible.

Yet decision-makers are often doing the opposite. We even see them overshooting the precautionary advice more often and by a wider margin than they overshoot the MSY advice – as if not knowing the

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17 ClientEarth (2020). Ask the right question, get the right answer: Scientific advice for bycatch or non-targeted stocks that have zero catch advice. July 2020. https://www.documents.clientearth.org/library/download-info/ask-the-right-question-get-the-right-answer-scientific-advice-for-bycatch-or-non-targeted-stocks-that-have-zero-catch-advice/

18 ClientEarth (2020). Ask the right question, get the right answer: Scientific advice for bycatch or non-targeted stocks that have zero catch advice. July 2020. https://www.documents.clientearth.org/library/download-info/ask-the-right-question-get-the-right-answer-scientific-advice-for-bycatch-or-non-targeted-stocks-that-have-zero-catch-advice/

19 As ICES clarifies all official catch advice provided by ICES (whether based on the ICES MSY or precautionary approach) is ‘consistent with the precautionary approach’, which is a necessary but not sufficient condition for MSY. ICES Advice basis. 20 December 2019. https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2019/2019/Introduction_to_advice_2019.pdf, P 6

20 For an illustration of the various reference points, please refer to Figure 1 in the above-mentioned ClientEarth briefing, see footnote 16.

21 For example, for plaice in the Kattegat, where the Commission requested advice for 2019 based on the precautionary approach. This corresponded to a larger catch than based on MSY (15237 t versus 9338 t).

22 As ClientEarth’s recent report on TAC-setting for 2015-2020 shows, TACs for stocks for which only precautionary advice is available have been set above this advice in the vast majority of cases throughout the whole timeseries (fluctuating around 80% from 2015 to 2019, with a slight improvement to just over 70% for 2020). In comparison to this, only 25% of the assessed TACs for 2020 exceeded MSY-based advice. ClientEarth (2020). Taking stock 2020 – are TACs set to achieve MSY? October 2020. https://www.clientearth.org/latest/documents/taking-stock-2020—are-tacs-set-to-achieve-msy/
speed limit leads you to believe there is none, or that it must be very high. And we see decision-makers in this scenario failing to take, or delaying, effective steps to improve monitoring and data collection, for example by ensuring full [catch documentation](#), in order to fill data gaps and allow for MSY-based advice.

**Conclusion: Use what you know, and the less you know, the more cautious you have to be!**

In simple terms, applying a precautionary approach to fisheries management in accordance with the CFP means being more, not less, cautious when information is more limited. The driver with the broken speedometer should drive more slowly, just in case he is actually driving faster than he thinks. He should try to get the car fixed and get more information about the speed limit – in the same way decision-makers should urgently invest in improving data collection, to move towards full MSY-based stock assessments and scientific advice.

The clueless driver is in a dangerous situation. Similarly, decision-makers are at risk of making our biodiversity crisis that much more catastrophic, leading Europe’s fishing industry to ruin, and leaving European seafood consumers and the economy with no choice but to turn to imports. They must face the risk that a stock with unknown status is in bad shape. The way to do that is by setting TACs in line with ICES precautionary advice where no MSY-based advice is available. At the same time, they need to use the scientific advice they do have on how to fish sustainably, instead of feigning ignorance in order to catch more fish.

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