



NSAC/EAPO Symposium on Innovative Fishing
“Precision-fishing: re-imagining bottom-trawling through innovative gear”
Brussels, 7 March 2024

Background

In February 2023, the Commission published the Fisheries and Oceans Pact with the main objectives being the promotion of the use of cleaner energy sources and reduced dependency on fossil fuels as well as reduced impact on marine ecosystems.

One of the most critical discussions of the past couple of years has been the future of bottom-trawling, the traditional method for capturing benthic species. Bottom trawling is one of the world’s main fishing methods and is responsible for 26 percent of the marine catch in Exclusive Economic Zones (EEZs).¹ The immediate existential issue is the so-called ‘choke situation’, whereby the exhaustion of quota for the limiting species can lead to closure of the mixed fishery. Furthermore, with calls for bottom-trawling ban in MPAs and ongoing research scrambling to provide the most realistic, quantifiable, and nuanced reports on the impact of bottom trawling on marine ecosystems, the industry is now faced with the challenging task of re-imagining the method and with it the narrative of the traditional fishing technique.

Both issues relate to the fishing methods applied. New, innovative gear could spur selective fishing and minimize bottom-contact, thereby contributing to the protection of vulnerable species and habitats, as well as reducing fuel use and CO₂ emissions through reduced drag. ‘Precision fishing’ could become compatible with ecosystem protection measures by effectively targeting and capturing valuable commercial species with the least possible unwanted effects on habitats and protected species. With such and other optimisations, demersal fishing could be reinvented as a nature-friendly supplier of healthy seafood.

New technologies and methods already give promise of a better way of catching fish. The seminar will discuss technical solutions as well as management approaches, and funding opportunities that may promote the implementation of Precision Fishing.

¹ https://www.researchgate.net/publication/359281130_New_perspectives_on_an_old_fishing_practice_Scale_context_and_impacts_of_bottom_trawling



Subject-matter

Several measures have been discussed in the Commission's Marine Action Plan and in various other fora, such as Producer Organisations, Advisory Councils and other associations, on the need for minimising impact of bottom-contacting gear on the seabed and benthic habitat in general. Some of those measures are:

- limiting **mobile bottom fishing in MPAs**
- **minimising by-catch** by adopting national measures
- **boosting selectivity with new and innovative gear and techniques**
- supporting the **use of less damaging fishing techniques** in transition to more **selective, less harmful and less fuel-consuming fishing practices.**
- developing general **solutions and incentives to reduce the environmental impacts of fishing**, such as **innovative fishing gear, new patterns of fishing, and improved fishing practices.**
- improving data collection planning and efforts, including in relation to **by-catch of sensitive species, impact of fishing on the seabed and fuel consumption.**
- setting up an **interactive platform on selective and innovative fishing gear**, sharing knowledge and good practices.

The seminar will exchange lessons learned from innovative fishing gear projects, aiming to contribute to fisheries image as a sector that is future-proof, nature-friendly and socially attractive. The focus will be on the challenges such as scientific, technical and regulatory bottlenecks when proposing and implementing new gear, as well as benefactors fostering and streamlining the innovation process. **We will not be asking *whether* bottom trawling is viable as a nature-friendly technique, but *how*.** We will explore the concept of 'Precision Fishing' defined as *the use of advanced tools and technologies to optimise fishing operations and management.*² The final objective of the event is to propose a suite of actionable measures aimed at re-imagining bottom-trawling with policy support, so as to conform with the necessary environmental objectives while continuing to provide healthy seafood to the growing population and livelihood for communities dependent upon it.

² <https://sntech.co.uk/blog/precision-fishing/>



Core questions

- Mimicking the agricultural concept of 'precision farming' (a management approach that focuses on (near real-time) observation, measurement, and responses to variability in crops, fields, and animals), is 'precision fishing' a viable approach to future fishing? What would it look like? What conditions need to be fulfilled?
- What are the existing and ongoing projects addressing unwanted bycatch and improvements in selectivity? How successfully are they achieving those objectives?
- Can innovations in precision gear and method transform fishing to be in line with acceptable impact levels both in MPAs and OECMs, with the objectives of EU biodiversity strategy for 2030, and threshold values under the MSFD?
- In parallel, can the definition of acceptable impact levels and acceptable fishing gears drive innovation to meet these levels and ensure coordination between conservation objectives and sustainable fishing activities?
- What are the current scientific, technical and regulatory challenges innovators are faced with?
- What challenges exist for the outreach of specific projects/gears? Are there platforms fostering knowledge exchange? What improvements could be made in the adoption and implementation of effective gear?
- Is the Technical Measures Regulation effective in minimising bottom contact and increasing selectivity? What are its drawbacks and how are they solvable? What other (regulatory) solutions can be applied?
- How can we enhance stakeholder engagement and connections between the researchers, regulators and end-users to ensure legitimacy and buy-in?
- How can we avoid instrumentalization of politics in a way that hampers the development and uptake of effective solutions?

Time and place

- 7 March 2024, 10.00-15.30 CET
- Sofitel, Brussels, Belgium