

Research for PECH Committee

Increasing selectivity in EU fisheries

State of play and best practices



The selectivity of a fishing method reflects its ability to select the desired species and sizes of individuals from the ecosystem in which the fishery operates. Fishing selectivity results from a combination of the selective properties of the fishing gear and the way the fishery is conducted. Fishing selectivity can be then increased, for most gears, by modifying the fishing gear configuration and/or the way it is operated. The implementation of the EU landing obligation has provided a strong incentive to increase the selectivity in EU fisheries. This study aims to give an

overview of the current state of play in selectivity developments in the wake of the landing obligation, in particular as regards the use of more selective fishing gears and the use of tactical measures, such as temporal and spatial closures, to avoid unwanted catches.

This study outlines the existing **types of selectivity measures** in EU fisheries, including the use of more selective fishing gears and implementation of temporal and spatial closures to reduce unwanted catches. Among the selectivity measures using gear technology, the study reviews the measures that have been recently developed and tested in EU fisheries for active gears, including trawls, dredges and purse seines, and for passive gears, including entangling nets, hooks and lines, and pots. For all measures, it provides a brief description of the modifications tested, and information about their effectiveness in relation to the catch of both bycatch and target species (when available). The review highlights that intense efforts in searching, developing, testing and adjusting selectivity measures to increase selectivity in EU fisheries has been deployed in the recent years. A wide diversity of measures has been developed and tested from all the main fishing gears used in EU fisheries, including the development of alternative fisheries using low-impact fishing gears. This research effort has been particularly intense on trawl fisheries. All parts of the trawls have

The present document is the executive summary of the study on “Increasing selectivity in EU fisheries – State of play and best practices”. The full study, which is available in English can be downloaded at: <https://bit.ly/4bDPuaS>

been subject to some kind of testing aiming at increasing their fishing selectivity, in several cases leading to effective solutions. Existing selectivity measures range from the simplest to the most high-tech and innovative ones, from the most cost-effective to highly costly ones. While improvements in gear technology have been very widely explored, the research has not been as intensive on tactical measures to avoid unwanted catches, in which several promising options exist and have been successfully tested. Fishing strategies measures are also diverse, including fishing closures, real-time measures, fishers' avoidance strategies, decision-support tools, mapping unwanted catches, depth-based and time-based approaches.

Based on a literature review and on exploration of existing projects at EU and national level, the study identifies and briefly presents **best practices** implemented by projects that have successfully contributed to improve selectivity and that could be replicated in other Member States. Among these best practices, strong collaborations with fishers, building trusting transparent and long-term relationships, promoting bottom-up initiatives, and providing the right incentives for such initiatives are considered key. Other important considerations to keep in mind when developing new selectivity measures include providing solutions adapted to the local specificities, developing "fishers friendly" solutions, balancing the simplicity vs complexity of developed measures. Optimizing the testing of new measures, performing rigorous testing, giving a large visibility to existing measures while providing an easy way to understand the main results to all stakeholders, communicating widely about the existing measures should also be broadly implemented. Finally, such studies require extensive data sets and detailed knowledge about both fisheries practices, dynamics and socio-economic aspects, and species behaviour, ecology and distribution. Better knowledge is crucial to understand fisheries-species interactions and to find effective solutions to avoid unwanted catches. Making best use of the existing datasets and further advance such knowledge, promoting international data sharing, and performing an ecosystem evaluation of the broad impacts of selectivity measures, such as taking cross-taxa conflicts into consideration, are also best practices that should be broadly applied to understand the best way to implement fishing selectivity.

To evaluate to what extent Member States have used **EU funding** for promoting innovative projects that increase selectivity, the study performed an analysis of how the European Maritime and Fisheries Fund (EMFF) dedicated to gear selectivity has been used by the Member States. The analysis shows that, over the period 2014-2023, a total of 1493 vessels from 10 Member States have benefitted from a total of EUR 12.47 million of EMFF (committed) financial support to increase gear selectivity. Large differences were found between Member States in the amount of funding (ranging from EUR 30 000 to EUR 2.83 million), in the number of vessels (ranging from 2 to 793) and in the distribution among gear types. Overall, the operations for passive gears (mostly gillnets, pots and set longlines) accounted for the largest part (EUR 6.4 million or 51.7% of all committed funding, 912 vessels or 61.1% of all fishing vessels), while active gears (mostly bottom trawls and purse seines) received EUR 4.6 million (36.7% of the total amount) for 530 vessels (35.5% of the vessels). The remaining 11.6% of the funding could not be attributed to any gear type. Nearly half of the funding was granted to small-scale coastal fishing vessels, representing 44.5% of the amount committed for 55.5% of the vessels.

Based on the results of the previous sections, the study suggests a series of **policy recommendations** for EU policymakers, on potential actions to increase the selectivity of EU fisheries:

- The **management objectives** aimed to be achieved with increased selectivity, and their priorities, should be **clearly defined**, because fishing selectivity is a broad term that can include many ecosystem components.
- Promoting the **collaboration** among fishers, scientists and other relevant stakeholders, and incentivizing **bottom-up approaches** appear important to favour the uptake of selectivity measures.
- Reinforcing **regionalisation** and increasing **flexibility** in management frameworks would also contribute to a better uptake.
- A **results-based approach** ensuring the implementation and compliance with fully documented fisheries, while promoting an easier access and sharing of fisheries dependent data, would help to confirm that measures are suitable to achieve management objectives.
- **Bycatch management** should be integrated into broader management objectives, in particular in the ecosystem approach to fisheries management, and monitoring should be implemented to assess the ecosystem impacts of selectivity measures.
- Finally, despite important progress in the development of selectivity measures, none of them could enable perfect fishing selectivity and the landing obligation could result in strong negative impacts. **The landing obligation could be used as a lever** to further incentivize the development and use of selective measures, for example by granting an exemption from the landing obligation to fishers using selective measures under catch documentation.

Further information

This executive summary is available in the following languages: English, French, German, Italian and Spanish. The study, which is available in English, and the summaries can be downloaded at: <https://bit.ly/4bDPuaS>

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