



Majorcan small scale fishing vessel.  
Photo: Oliver Navarro



**MINOUW**

## Science, Technology, and Society Initiative to Minimize Unwanted Catches in European Fisheries

ID-634495

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### The MINOUW Consortium

The MINOUW project is built around a Consortium of 15 beneficiaries and 4 linked parties. The Consortium includes fisheries technologists, fisheries scientists, universities, a non-governmental organization and local fisheries managers.

#### Beneficiaries:



#### Linked parties:



Agencia Estatal Consejo Superior De Investigaciones Científicas (CSIC) Spain • Consiglio Nazionale Delle Ricerche (CNR) Italy • Haskoli Islands (UI) Iceland • WWF European Policy Programme AISBL (WWF) Belgium • Illes Balears (DGMRM) Spain • Centro De Ciencias Do Mar Do Algarve (CCMAR) Portugal • Havforskningsinstituttet (IMR) Norway • Consorzio Per Il Centro Interuniversitario Di Biologia Marina Ed Ecologia Applicata G. Bacci (CIBM) Italy • Hellenic Centre For Marine Research (HCMR) Greece • Euskal Herriko Unibertsitatea (UPV/EHU) Spain • Nisea Societa Cooperativa (NISEA) Italy • Proyectos Biológicos y Técnicos S.L. (PROBITEC) Spain • University Of York (UYork) UK • Israel Oceanographic and Limnological Research Limited (IOLR) Israel • Helsingin Yliopisto (UH) Finland • Safety Net Technologies (SNTech) UK • The FishSpektrum Project Spain • Aplysia Italy • Ecopath Support Group Spain

The MINOUW project is a Research and Innovation Action (RIA) of Europe's Horizon 2020 Framework Programme, addressing topic "Towards a gradual elimination of discards in European fisheries"



## The problem, the needs

The catch of unwanted species or unwanted fractions of commercial species (“unwanted catches”) is a pervasive problem in world fisheries. Unwanted catches are returned dead to the sea in most cases, representing a wasteful use of natural resources.

Fish may escape alive or dead and are not accounted in the net catch, while unwanted fishes caught (UWC) are subsequently discarded at sea. MINOUW activities will seek to develop technologies and fishing procedures to maximize the amount of fish that escape alive after encountering the net or survive discarding after being caught. At the same time, the project seeks to minimize “gross removals” i.e. fishes that escape dead (“pre-harvest mortality”) or are discarded dead (“post-harvest discards”). The project will also evaluate the best ways of utilizing the fraction of the unwanted catch that is brought to land under the Landings Obligation, while avoiding creating incentives to produce unwanted catches.

## Overall objective

The project’s overall objective is to **minimise unwanted catches by incentivising the adoption of fishing technologies and practices that reduce pre-harvest mortality and post-harvest discards**, while avoiding damage to sensitive marine species and habitats.

The general approach will be to develop and demonstrate technical/ technological and socioeconomic solutions that enable and incentivise the fisher to firstly avoid taking unwanted catch and, where this cannot be reasonably

or practically achieved, to utilise it productively and sustainably, but without profit to the producer.

The solutions for dealing with unwanted catches should be based on, in order of priority, avoidance, selection and utilization. These solutions will be developed and demonstrated in a case-by-case analysis of the main types of European fisheries, using a multi-actor approach (- fish producers - fish consumers - local fisheries managers - fisheries technologists - natural scientists - social scientists) working collaboratively on practical solutions that are technologically feasible, environmentally sustainable and economically viable.

## The MINOUW approach

The project aims at contributing to the gradual elimination of discards on a case by case basis, using the best available scientific advice, taking into account the economic impacts on the industry, and promoting innovations and changes in the fish harvesting tools and technologies. The project will follow a holistic approach to minimizing the problem of unwanted catches by developing activities in seven workpackages (including a project management workpackage).

The general approach to obtaining the objective of **fisheries with minimum unwanted catches** is shown in the next page diagram.

Practical solutions will be developed in 18 case studies, representing the three main European fish harvesting fleets: bottom trawl, pelagic purse seine, and small scale fleets, with different problematic regarding unwanted catches and different geographical characteristics with Mediterranean and Atlantic study sites. Both valuation of the real dimension of by catch and discards, as well as technological solutions will be envisaged.

In **dialogue** with end users involved in fish harvesting and representatives of policy makers and civil society, technologists and scientists will explore solutions to the discard problem, covering the domains of technologies, bio-economic models and policies. The solutions will be investigated and demonstrated in **case studies**, in cooperation with end users. The project encompasses a diverse range of activities to achieve the objectives: research, experimental, consultation, participatory, mathematical modelling, knowledge transfer, outreach and capacity building.

The gradual elimination of unwanted catches will be achieved under the following conditions:

- technical/technological solutions that enable commercial fisheries to minimise unwanted catches are readily available and economically viable.
- there are strong socio-economic incentives to avoid generating unwanted catches.
- unwanted catches brought to land (mandatory under CFP reform) do not have an economic value to the producer.
- the producer has non-monetary incentives to bring all unwanted catches to land.

