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Strategic Spanish Project relating responsible fishing on discard reduction (REDES)

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A DESCRIPTION OF A RECENTLY DESIGNED STRATEGIC SPANISH PROPOSAL RELATING RESPONSIBLE FISHING ON DISCARD REDUCTION (REDES) IS PRESENTED. A GAP ON RESEARCH ON FISHING GEAR TECHNOLOGY HAS BEEN IDENTIFIED IN SPAIN DURING LAST YEARS. REDES, IS A MULTIDISCIPLINARY PROPOSAL AIMED TO FILL THAT GAP INVOLVING FISHERMEN'S ASSOCIATIONS, SHIP-OWNERS, TECHNOLOGY INDUSTRIES, RESEARCH INSTITUTES AND UNIVERSITY DEPARTMENTS, COLLABORATING TOWARDS A SELECTIVITY IMPROVEMENT BY INTRODUCING TECHNOLOGICAL INNOVATIONS IN FISHING GEARS.

Information provided by the European Commission shows that each year, (depending on the fishery) from 10 to 60% of live organisms, caught in European fisheries, is thrown back into the sea. This discards' volume damages the effectiveness of measures taken to conserve the fishing resources, since even though these catches are not landed, they die and, in that way, the existing spawning stock biomass capacity is reduced. There is not a unique solution for discard problem; nevertheless there is an agreed view in European Commission of the necessity to reduce discards of European fisheries. Furthermore, there is also a wide support for a 'fishery by fishery' approach, where specific reduction targets are set, but the specific way to reach them is left to the industry to develop results-based management measures (Working document of Directorate-General for Maritime Affairs and Fisheries, August, 2008).

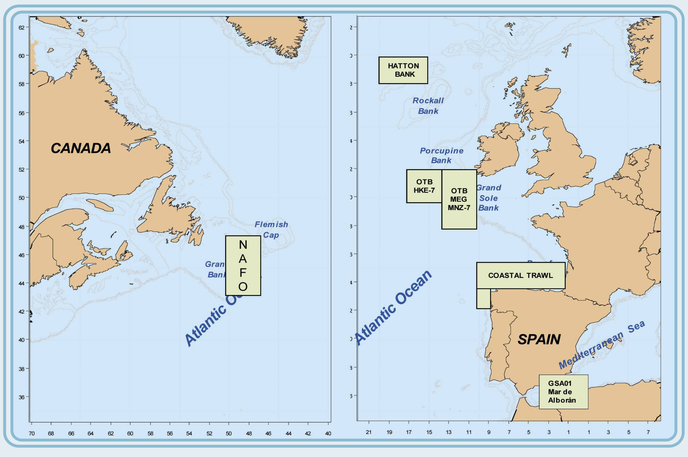
Nevertheless there are various possible options to reduce unwanted by-catches and eliminate discards and the measures that can, and should be put into place from 2010 are in Council of the European Union, 9974/1/09 REV 1. One of the options is based in improvements in gear design and/or in mesh sizes, to improve selectivity. The technical measures regulation currently under discussion, proposes a fast-track procedure for quick implementation of new gear, or other technical measures, that improve selectivity and reduce discards. These new gears can also benefit from aid under EFF.

This was the option chosen by a partnership of Spanish stakeholders lead by the Spanish Institute for Oceanography (IEO) and CETMAR Foundation (CETMAR), to contribute to the challenge of the discards reduction objectives. The consortium proposes to deal with a fishery by fishery approach in some of the most important Spanish Units. REDES is an industrial research project proposal submitted to the Spanish Science and Innovation Ministry to apply for funding under the call for Strategic and Singular R&D Projects. REDES' aim is to generate technological innovations and devices on fishing gears to be tested and adopted by Spanish fishing fleets, particularly trawling fleets. The project seeks, through this channel, reducing the capture of unwanted marine species or undersized individuals, carried out by commercial fleets, with the aim of reducing death caused by discards.

The partnership that was set up to design and implement the project, in case it gets the support that is needed, includes all the major agents that can guarantee such an ambitious approach:

- The fishing industry is represented by two of the main Spanish Associations involving the fleet that will have to face relevant discards' reductions in the near future: CEPESCA, and ARVI. Furthermore nine fishing companies with direct interests in the fisheries targeted by the project are also members of the partnership.
- Other key industrial partners in REDES are those companies having to deal with fishing-gear and fishing technology. TECNOPESCA PYM and MAREXI are two Spanish SMEs that will lead the implementation of new ideas into specific products feasible for target fishing units.
- RTD activities needed for such an ambitious and multidisciplinary project design will be carried out involving up to eight different research groups from five different public research institutions such as the Spanish Institute for Oceanography (IEO), the University of Vigo, the University of A Coruña, CETMAR Foundation and CEHIPAR (this last to be hired by the University of A Coruña, due to technical and administrative reasons).

REDES focuses fishing gear modifications based in fishery by fishery studies. Due to the fact that discards information, about at least for the last 10 years, are based on that low disaggregated level, members of REDES will analyze the causes that produce such discards at that stage and improve the capability of gears to be more selective. The project has been designed to face the problem in total of 8 different target fisheries.



CONCLUSIONS

REDES is broad scale project for reducing fishing discards by improving the selectivity of fishing gears and devices. Members of REDES partnership agree that improving fishing technology is one of the keys for reducing discards and thus for introducing and spreading sustainable practices into some of the most relevant fisheries for the EU, and of course for Spanish fleets. The project can be considered a good example on how industry and research community can join efforts on a common goal even though the scale of ambition of the project is high and the main industrial players in the project are small and medium sized companies.

Even in the worst scenario, where although such a great effort in improving gears' selectivity does not yield a significant reduction of discards, the results would also be worthy for different reasons: the knowledge acquired on a fishery by fishery bases about discards and about the, biological, social and economic repercussions of their reduction, can provide better orientations for policymakers on how to implement other alternative or complementary measures that guarantee the sustainability of fisheries without having to assume a too high economic and social cost. The diffusion among stakeholders, of the new possibilities of CEHIPAR centre, for gear tests, and software tool to be developed by the University of A Coruña, will also become an opportunity for making the gear design process more cost-efficient in comparison with the traditional way of accomplishing this process until now by Spanish firms.

DESCRIPTION

REDES HAS BEEN DESIGNED AS AN INTEGRATED PROJECT COMPRISING THE FOLLOWING PILLARS OR SUB-PROJECTS (SPs):

SP1

Analysis of the distribution, performance and factors influencing the discards of Spanish fishing fleets operating in the North Atlantic and Mediterranean fisheries. This subproject will be lead by IEO and its results will strongly condition the development of the other subprojects as the information expected to be yield will be key to focus new designs, testing activities and, in general all the other stages of the project.

SP2

Design and construction of more selective fishing gears and devices. This subproject will be lead by TECNOPESCA PYM. New designs for each fishery and also new electronic, acoustic and optical devices will be proposed for being tested within SP3, and those selected as potentially feasible will be scaled and tested in fishing campaigns.

SP3

Simulation, testing and redesign of new fishing gears and devices. This sub-project to be lead by ARVI, has been designed as the testing ground for all the project innovations. Relevant novelty proposed by REDES will not only come from new fishing gears and devices themselves, but also from the methods and approach proposed and very specially by the technical means that will be set up and made available for future research and development in fishing gears. A new computing tool will be developed as the first filter to analyse the effectiveness of new designs. Those more promising innovations will be tested at a small scale at CEHIPAR which is an internationally recognized hydrodynamic centre for model tests and finally a set of field trials will be also carried out to confirm the effectiveness of new gears and devices in comparison with traditional ones.

SP4

Analysis of the major effects expected from the introduction and spread of use of selective fishing gears. It has been foreseen by the consortium to accomplish at this stage of the project a deep analysis on the different kinds of impacts that could be expected under different possible scenarios of technology spread within the fishing sector. Such impact analysis is considering biological consequences, bioeconomic analysis and socioeconomic repercussions in the short, medium and long term. This subproject has been designed to be lead by CETMAR.

SP5

Project Office: Coordination, dissemination, contribution to standardization and technology transfer support. This horizontal pillar of the project has been designed as the coordination, dissemination and management strategy that can better respond to the requirements that can be expected from a project like REDES considering its broad scale and the scope of its objectives. CETMAR, with the support of IEO on scientific coordination, is the institution that will assume the leading role for this subproject.