

5. EFIMAS CONSORTIUM PARTNERS

- Danish Institute for Fisheries Research, DIFRES, Denmark (Project Coordinator)
- Centre for Environment, Fisheries and Aquaculture Science, CEFAS, UK
- Netherlands Institute for Fisheries Research, RIVO, Netherlands
- Institut Français de Recherche pour l'Exploitation de la Mer, IFREMER, France
- Fisheries Research Services, FRS, UK
- Finnish Game and Fisheries Research Institute, FGFRI, Finland
- Agricultural Research Centre – Sea Fisheries Department CLO-DvZ, Belgium
- National Research Institute for Agriculture & Fisheries, IPIMAR, Portugal
- Institute of Marine Biology of Crete, IMBC, Greece
- National Centre for Marine Research, NCMR, Greece
- Marine Institute, Ireland
- Institute of Marine Research, Norway
- Institute of Marine Research, National Board of Fisheries, Sweden
- Institute of Freshwater Research, National Board of Fisheries, Sweden
- Sea Fisheries Institute, SFI, Poland
- Instituto Tecnológico Pesquero y Alimentario, AZTI, Spain
- Institute for Fisheries Management and Coastal Community Development, IFM, Denmark
- CEMARE, University of Portsmouth, United Kingdom
- Agricultural Economics Research Institute, LEI, Netherlands
- Danish Research Institute of Food Economics, FOI, Denmark
- Institute for Research in Economics & Business Administration, Norway
- Istituto Ricerche Economiche per la Pesca e Acquacoltura, IREPA, Italy
- Imperial College of Science, Technology and Medicine, UK
- Consejo Superior de Investigaciones Científicas, CSIC, Spain
- Universitat de Barcelona, Spain
- Universidad de País Vasco / Euskal Herriko Unibertsitatea, Spain
- Universidad Pablo de Olavide, UPO, Spain
- University of Helsinki, Finland
- University of Newcastle, UK

6. LINKAGES WITH OTHER FISHERIES MANAGEMENT INITIATIVES

EFIMAS is one of the largest among a string of ongoing EU supported research projects that aim to evaluate and improve the management of European fish stocks. EFIMAS works closely with both national and international projects, including related EU FP5 and FP6 research projects.

FURTHER INFORMATION:

For details on specific project components, partners, ongoing activities, progress and output, please visit the EFIMAS website or contact the project coordinating team at:

Web: www.efimas.org

Email: efimas@efimas.org

Project coordination:

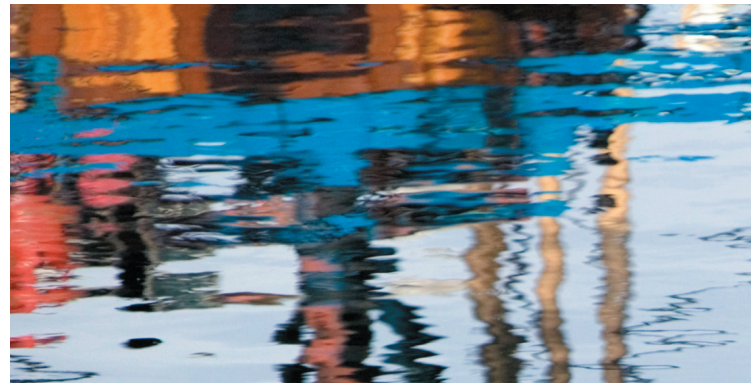
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Operational Evaluation Tools for Fisheries Management Options

Specific Targeted Research Project
EU 6th Framework Programme

April 2004 - March 2008

Operational Evaluation Tools for Fisheries Management Options

WHY EFIMAS?

To facilitate the development of better fisheries management regimes, a large European research project, EFIMAS, has been launched to develop a set of new tools to simulate and evaluate the biological, social and economical consequences of a range of fishery management options and objectives within different management regimes. EFIMAS is implemented in cooperation between 29 national research institutes through support from the European Commission.

1. INTRODUCTION

European fisheries are not doing well at the moment. Many important stocks are declining and so are the number of fishing boats and people employed within the fishing industry. At the same time, the management and regulation of European fisheries are becoming more and more complicated every year. In response to this situation, managers such as the European Commission and national authorities are working to develop alternative management evaluation tools and management regimes that take a broader, more long-term perspective and consider not only the biological consequences of managing fish stocks, but also social and economic impacts, for instance on the fishing industry.

Virtual fisheries management

In the same way that a pilot might fly in a simulator before flying for real, the EFIMAS project will develop software tools and simulation models within an evaluation frame that can predict and compare the outcomes of different management options on European fish stocks and fisheries. And instead of only looking at the impact of these virtual regimes on the fish stocks, the project also looks at the social and economic outcomes in a broader, more holistic context. This will provide managers a better idea of the consequence of a given management intervention before opting for a particular management approach.

2. PROJECT STRATEGY

EFIMAS will develop and integrate a variety of modelling tools into a robust framework within which to simulate and evaluate a range of fishery management objectives and options. In particular the project will:

- Develop computer based models to run stochastic simulations incorporating data from selected EU fisheries, taking into account fleet interactions and the impact of the environment on fisheries and vice versa.
- Compare a range of management options generated with the current management of selected 'test' stocks and fisheries.
- Compares the performance of a range of management options under alternative management systems and objectives.

Through this framework, EFIMAS will evaluate among other things: different stock and fishery assessment models; different economic-based fishery models; dynamics of the case stock and fisheries systems; uncertainties in the dynamics and in the data collection, assessment and advisory processes; different management systems; and compare these with for example the ICES advisory process.

A review of the current knowledge base and institutional set-up of relevant fishery management systems around the world is used to make the framework flexible enough to include a broad range of options under alternative fishery management systems.

The framework and simulation models will be tested in selected case studies representing different types of EU fisheries in different areas, e.g. in the North Sea, Baltic Sea and Mediterranean:

- Mixed flatfish fisheries, North Sea
- Mixed roundfish fisheries, North Sea
- Salmon fisheries, Baltic Sea
- Mixed nephrops fisheries, East Atlantic
- Mixed northern Hake fisheries, ICES VI-VIII
- Swordfish fisheries, Mediterranean
- Mixed hake fisheries, Mediterranean
- Cod fisheries, Baltic Sea

3. STAKEHOLDER PARTICIPATION

Feedback from users will be sought in the development of the framework, through interviews and workshops with representatives from fisheries management, the fishing industry, and NGOs. Through such dialogues, the project seeks, together with a number of EU sister projects, to give stakeholders greater insight and confidence in the management process by making it broader and more accessible to them.

4. PROJECT OUTPUTS

Contributing to policy development

- EFIMAS enables more holistic scientific management advice to fishery managers and policy makers, including robust management evaluation tools and a framework driven by numerically defined harvesting rules.
- The project develops an evaluation framework of existing and new interactive fishery advice and management models that identify the social and economic, as well as the biological, consequences of given management decisions.
- The project aims to help build greater stakeholder trust in advice and management by incorporating a wider range of variables in the decision-making process, by illuminating it and make it more accessible.

Some specific project deliverables:

- Review of global management systems and decision-making processes relevant for EU fisheries (October 2005).
- Preliminary software package of operational models to compare alternative fisheries management regimes (October 2006).
- Final software package - aiming at a high level of *user-friendliness* - with documentation (June 2007).
- Policy Implementation Plan detailing the application of the evaluation framework at the fishery management level (April 2008).