

“EASE”

Evaluating the advisory structures for fisheries management in Europe

In fisheries management, routine work from data collection to the yearly updating of fish stock assessments absorbs a significant amount of the available human and budgetary resources. In general, these resources are in short supply and may be declining. The added value of the existing machinery compared with a less data- and/or time-consuming procedure is not known. In addition, it is no longer clear whether present systems can be maintained or whether they are appropriate for emerging issues, notably those relating to a more holistic approach to fishery management.

The main aim of the **EASE Concerted Action** was to **set up the basis for more appropriate data collection and analysis programmes in order to support existing and emerging fishery management issues**. In other words, the core question of the project was: **“How can we get what we need more efficiently and maybe at a lower cost?”**

To understand the current balance between resources devoted to data collection and value of these data in the provision of scientific advice, EASE analysed the various advice categories and reviewed all data presently routinely collected. From these data, it became clear that the estimated yearly total cost of scientific support to the current fisheries advisory system was equal to about 80 Million EUR (numbers for 2002), which can be split as follows:

1. Data collection and advice	60 Mill. EUR
- Surveys	356 Mill. EUR
- Landings	12 MILL. EUR
- Discards	6 Mill. EUR
- Assessment & advice	7 Mill. EUR
2. Marine fisheries research	20 Mill. EUR

In comparison, the value of fisheries landings at first sale equalled 6,3 Million EUR.

As concerns data quality, the following remarks were made:

- **Landings data** are crucial for the present analytical stock assessment, but statistics are biased by un-allocated landings, black landings and misreporting.
- **Discard data** are required for giving advice in almost all management systems, but are highly variable in many cases, due to the fact that the present sampling methods are insufficient, not only in their design, but also in their coverage.
- **Commercial CPUE (Catch per Unit Effort) data** were identified as key input data for assessments, but are in ICES not used to their full potential. The problem with these data is that they are derived from landings (as data on discards and misreportings are lacking) and often not properly standardised.
- **Research survey data** are used as the main data source to provide advice where catch data is unreliable or unavailable and provide less bias in long-term series than commercial data, but surveys should be better organised and databases standardised.

Project acronym:

EASE

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European Advice System Evaluation.

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“EASE CONCLUDED THAT THERE IS ROOM FOR IMPROVEMENT IN SCIENTIFIC AND TECHNICAL DETAILS, SUCH AS DATA COLLECTION, DATABASES, PROCESS UNDERSTANDING AND ASSESSMENT METHODOLOGY”

Another objective of the EASE project was to quantify the quality of the scientific outputs derived from the data inputs. Since much advice is qualitative and relies on expert judgment, this objective was limited to quantifying the reliability of routine annual stock assessments upon which advice is formulated. **Assessment in most cases appeared to be overoptimistic:** in 26 cases fishing mortality (F) was under- and spawning stock biomass (SSB) was overestimated, whereas in 4 cases the opposite happened and only in 6 stocks F and SSB were neither over- nor underestimated. Prediction error should therefore be higher.

EASE also tried to identify alternative uses of the data available and alternative analytical methods that could support present fishery management needs as well as those that could address new and emerging issues. Issues considered here were **long-term strategies and management plans, multi-annual decision rules, mixed fisheries, effort management, and the shift towards an ecosystem-based approach.**

EASE concluded that there is room for improvement in scientific and technical details, such as data collection, databases, process understanding and assessment methodology. Enhanced collaboration with the

industry and environmental programmes could lead to new platforms for monitoring, and this decrease monitoring costs for fisheries. This could also be achieved by enhancing the collaboration in sample and data analyses between institutes, by taking into account the specialisation in different national laboratories. This freed effort from sampling and data analysis could then instead be used for data evaluation and method development.

The results obtained through EASE have made it possible to improve the implementation of the existing Council Regulation (EC) No 1543/2000 of 29 June 2000 (establishing a Community framework for the collection and management of the data needed to conduct the CFP) In addition, they have facilitated the revision of this regulation. February 25, 2008, a new Regulation (Council Regulation (EC) No 199/2008 concerning the establishment of a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy) was adopted by the European Council, introducing provisions to the existing data collection system to meet the new developments following the 2002 Reform of the CFP.