# **1** Introduction

I present here a document based a research paper of which I am principle author: *Wilson D.C. and R.B. Jacobsen "Governance Issues in Mixed-Fisheries Management: An Analysis of Stakeholder Views" Deliverable 6.3 of the A framework for fleet and area based fisheries management (AFRAME) Project EU Sixth Framework Programme Contract no: 044168.* This is offered as a contribution to the discussion of Section 4.4 of the Green Paper. The report is a result of the examination of information produced by the following sociological research activities: the observation of nine scientific deliberations and three meetings of Regional Advisory Council (RAC) working groups; interviews with six fisheries scientists, five government fisheries managers and short interviews with 12 RAC members; three focussed group interviews with fisheries stakeholders; and interviews with fishers in 12 fishing ports around Europe. With one exception the short interviews with RAC members were carried out through an e-mail questionnaire.

## 2 Three Patterns of Management

Interactions between measures, fleets, fish species and the environment are the nature of mixed fisheries and institutional complexities add to this melange. The sources of rules and laws range from global agreements to local ordinances regulating coastal access, and fisheries are often regulated by two or more ministries. Not only are laws and regulations complex, they have cumulative effects on fishing operations and fishers' access to their livelihood. With respect just to the cod recovery plan for the North Sea the NSRAC complained:

Q1. The current scheme has become excessively complex, causing difficulties in implementation for vessel owners and member state administrations. This does nothing to enhance the credibility of the Cod Recovery Plan or increase support for it (NSRAC 2006).

Partly as a result of trying to respond to this complexity, the institutional picture in regard to fisheries management in Europe is very much in flux. The basic approach remains top-down, command and control management, but there are movements towards more participatory and decentralized decision-making. The Commission is often forced to make very detailed management decisions, which in turn leads to a constant flow of requests for modifications to and derogations from European rules. The overall system is operating at too large a scale and is too constrained by its political role within Europe, most directly by the rules of relative stability, to develop effective management measures for mixed fisheries.

#### 2.1 Top-down Management

Fisheries management must remain, at its most fundamental level, a top-down, command and control affair. Fisheries resources belong to all citizens, and it is the responsibility of the government to manage those regimes on their behalf. Beyond this basic legal imperative, command and control is the most effective basic approach to the management of resources that cover a large geographical scale, because it can bring about relatively predictable outcomes across wide areas. In doing so, however, it pays a steep price in terms of lost local legitimacy and support and having to make decisions based on much poorer information than is available on the smaller scales. Command and control regimes are also better able than purely participatory approaches to respond and deal with problems where negotiated outcomes are difficult to achieve. In Europe, which faces

great problems with multiple jurisdictions and competition over resource allocation, there are simply decisions that are best made by central authorities.

The problems of legitimacy, complexity and scale, however, have led European managers to a search for complementary approaches to command and control in the form of limited stakeholder participation. The RACs are the main expression of this. It is hoped that RACs can make the management system more responsive:

Q2. RAC Staff Member: The problem at the moment is that the EU decision system is much too "heavy" and lacks responsiveness to decide quickly on the most effective technical measures (e.g. restrict access temporarily to places where the mix of species or sizes is inadequate). Potentially, RACs might take this sort of responsibility, but they also should be structured to take decisions very quickly, close to real-time. In any case, the mixed-fishery issue needs a judicious mix of the various management instruments (all well known, with their pros and cons). Compromises have to be found, and someone has to decide firmly and quickly, and enforce the consensus decision. Great if RACs can do it!

Our interviews suggest that two other institutional patterns are emerging, both of which are commonly found in fisheries management in other developed countries. These two patterns are comanagement and cooperative management. The RACs are the current institutions where both these patterns are seen.

#### 2.2 Co-management and Cooperative Management in RACs

"Co-management" involves a group of fishers working with the government in various ways, ranging on one side from nearly independent community management that reports to the government and relies on it only for local legitimacy, to the other end of the spectrum where fishers have a limited advisory role in government management. It is helpful to contrast "co-management" with "cooperative management". The difference is that co-operative management involves a greater number of stakeholders and a wider range of decisions. Where the point of co-management is to involve fishers in the hopes of better crafted, more effective management and enforcement, the point of cooperative management is to ensure that a wide number of voices are available to management decisions.

In Europe the RAC system is an attempt to move the command and control system a few steps in the direction of both co-management and cooperative management. In interviews with RAC members the two patterns are very clear. Industry members conceived of the RACs' role mainly in terms of co-management. Co-management-type input into the crafting of management measures is particularly useful in trying to address the complexity of mixed-fisheries management. Here is how one industry member describes the role of RACs in relation to mixed-fishery measures:

Q3. Interviewer: How should quotas, effort and technical measures be balanced within mixedfisheries management? How can the RAC facilitate this balance? Industry RAC Member: Quotas are a convenient means of sharing the resource. Effort control is an economically perverse control measure that indicates a failure of structural policy. Technical measures can help to improve the exploitation pattern in mixed fisheries. RACs should work to reduce the negative features of a TAC system, without throwing the baby out with the bath water. TACs, compliance, technical measures and fleet profitability will all be enhanced if there is a balance between capacity and available resources.

The respondent is pointing to the complexity of interactions among management measures and describing the RACs' role as essentially getting the best they can for the industry out of a difficult management situation. This second industry member emphasises the role of fishers' knowledge:

Q4. Interviewer: What is the main challenge for recovery plans in a mixed-fisheries context? Industry RAC Member: Developing avoidance and discard reduction plans on the basis of industry knowledge about selective gear, and spatial and temporal patterns of fish distribution.

A third industry respondent makes it clear that the need for fishers' input into the crafting of management measures is seen directly in economic terms. RACs are a mechanism for reducing the pressure of management while achieving conservation goals in ways that respect the realities that the fishing fleets face:

Q5. Interviewer: What would you say are the most important lessons from past experience with recovery plans in Europe? Industry RAC Member: It is possible to draw the following lessons from these experiences. It is not compulsory to put in place a management/restriction of fishing effort to recover a stock. The important thing is to find measures that can be adapted to the species that one wishes to protect and that can be adapted to the activity of the fleets (technical measures, area closure, management of effort or capacity, etc.)

While the industry respondents define the role of RACs in mixed fisheries in ways that fit the comanagement pattern, the NGOs have a very different take on these questions of governance and complexity in mixed fisheries:

Q6. Interviewer: How should quotas, effort and technical measures be balanced within mixedfisheries management? How can the RAC facilitate this balance? Conservation NGO RAC Member: Quotas should be set at the appropriate level, so that interactions within the ecosystem are not significantly affected. Technical measures, including spatial measures, should be applied to complement output controls but also to ensure that the overall footprint of the fishery is within set limits. The same theory should apply to the total amount of effort applied to the ecosystem - which can then be divided up into the respective fleets or fisheries.

Here the emphasis is on reducing the complexity of management measures by taking a broader ecosystem-based approach. The stress here is on overall limits on human activities. The view is more strategic. This does not mean that the NGOs do not recognize an important role for fishers' knowledge; they do indeed as the next quote shows. But their outlook remains much more strategic. As both the following quote, and other quotes below, will show, this can lead to real disagreement not only about directions, which is to be expected, but about the roles that RACs should play:

Q7. Interviewer: How should quotas, effort and technical measures be balanced within mixedfisheries management? How can the RAC facilitate this balance? Conservation NGO RAC Member: The RACs should focus on long-term measures - as they were intended to do - and spend proportionately less time on short-term issues like TACs and quotas (on which decisions quickly become impossible for the consensus of the stakeholder breadth of the RACs, i.e. the fishermen will mostly agree among themselves, but taking the other (third of) stakeholders with them is generally intractable).That said, the sector in the RACs has a huge contribution to make on using fishermen's knowledge to advance the development/implementation of technical measures, as the Scottish demersal fishermen are already doing with real-time closures.

This tension between the strategic and tactical thinking reflects, but is not the same as the standard disagreements one would expect between the NGO and industry participants. Within the RACs the tensions over these two different kinds of roles form the context for discussion of management measures.

### 3 Conclusions and Implications

Fisheries management always involves both strategy and tactics, but having both the cooperative management and co-managements roles within the same advisory bodies reduces efficiencies on the both the levels of the best use of RAC time and the best use of RAC member time. Separate bodies playing the cooperative and co-management roles would be a much more satisfactory arrangement.

Again, this approach presupposes that the overall system is not based on government micromanagement of fishing operations but on a clear and efficient division of labour.

The results-based management that the green paper is considering is one way to approach find this efficient division of labour. I suggest that results based management must really include three levels:

- 1. A governmental level to place overall limits on ecosystem impacts. This level should be carried out on regional seas level by the Commission and Member State governments according to principles laid down by the Commission.
- 2. A middle level to translate these impacts into operational limits for particular fisheries. This would be the cooperative management role and should be played by the RACs as they are currently constituted, or with greater representation of non-harvesting interests, under the guidance of and as advisors to the regional bodies.
- 3. The lower level which would be the development of plans for fisheries exploitation that stays within the limits set at levels 1 and 2. This would include plans for meeting the burden of proof of demonstrating compliance with the limits. This is where the pure industry/government co-management role would best be played out.