



## Report of the NSRAC Focus Group on Self-Management

**Monday 11<sup>th</sup> May 2009**  
**CPMR Offices, Brussels**

**Rapporteur: Tony Hawkins**

**Draft**

### **1. Introduction & Welcome**

- 1.1 The chairman, Barrie Deas, welcomed participants to the meeting of the focus group, which had been set up by the Demersal Working Group of the North Sea RAC to look at prospects for self-management under the CFP. The last meeting of the Demersal WG had discussed the Control Regulation and the forthcoming Green Paper. There were contrasting visions of where the CFP should go. The Control Regulation favoured an intensified top-down approach. The alternative vision was one of self-regulation and self-governance. The focus group has been established to consider the implication of the latter approach.
- 1.2 We now had the Green Paper, which opened a discussion on the transfer of responsibilities to the regions, member states and the fishing industry, with central rules determined by the Commission, Council and Parliament, perhaps with RAC involvement. Our meeting would discuss what this entailed and how it might work at a practical level. The focus group would forward its views to the Demersal WG for further discussion.
- 1.3 The chairman welcomed Dr Poul Degnbol, Scientific Adviser to DG Maritime Affairs and Fisheries of the European Commission, who then gave a presentation on the Commission's current thinking

### **2. Presentation by Poul Degnbol on Results-based Management**

- 2.1 Fishing adapts to anything which affects it, including the regulations which are imposed upon fishers. Fishers respond in a rational and innovative way to balance considerations of profitability, practicality and legality. Most instruments are intended to limit negative impacts by capping catches or by reducing by-catches of non-target species or juvenile fish. But in most cases there is also some short

term economic loss. Adaptations are developed by fishers which reduce this loss. In this process the intended positive effects on non-target species and juveniles may be reduced.

- 2.2 We therefore end up with a micromanagement spiral within a top-down paternalistic system. A conservation objective is identified. Technical measures to achieve this are put in place. The industry experiences losses of catch value or fishing opportunities and then makes technological and other adaptations which nullify the negative economic effects of regulation. These adaptations cancel any conservation effects and the result is that the conservation outcomes are not achieved.
- 2.3 As a result of this process the rules become ever more complex, reaching a point where they cannot be understood either by those imposing them or by those affected by them. Interesting and complex legal prose develops, which is matched by equally interesting technological innovations by fishers.
- 2.4 The outcomes of this micromanagement spiral include:
- Perverse technologies
  - Non-economical technologies and tactics
  - Technologies which do not achieve conservation targets
  - Low legitimacy
  - Low compliance
  - Increasingly paternalistic governance - down to repair guides in legal text!
  - Widening the fisher-science-manager gaps
  - Non-achievement of objectives - ecological, economic, social
  - Complex and costly policy
- 2.5 These results are nobody's fault. Everyone is reacting perfectly rationally to the role assigned to them in the fisheries management system. The problem is systemic – everybody is locked into their roles, acting rationally within an irrational framework – which leads to overall irrational performance. The solution is to change to a system where it is in everyone's interest to take responsibility and do the right thing.
- 2.6 An example can be taken from the regulation of traffic speed. If the rules were as complex as fishery regulations they would not be understood or observed and would not fit on the road signs. Instead simple limits are set – like a speed limit. Nobody cares how that is done technically – or how fast a car can go as long as you drive within prescribed speed limits. Similarly with environmental regulation: industries are given maximum limits on emissions. They are required to document the evidence that emissions are within limits. Regulation defines outcomes, not the means to achieve outcomes. The burden of proof lies to a large extent with the industry.
- 2.7 Why should fisheries be any different?

There is a lack of practical means to control outcomes  
But we have increasingly better monitoring options

There is a lack of understanding of which outcomes can reasonably be expected  
But we have considerable knowledge about impacts and mitigation options

There have been problems in the past  
But is history binding?

2.8 Results-based management offers a change towards specifying the acceptable impact rather than the acceptable technology. It sets:

- Maximum catch
- Maximum acceptable by-catch of juveniles, above quota, non-target species
- Maximum acceptable impact on habitat
- Maximum acceptable impact on sensitive species and sensitive habitats

Industry would be able to develop solutions which meet the outcome requirements – and are practical and economically sound.

2.9 Results-based management means a reversion of the burden of proof. Data and information is the minimum price for industry to pay to society for being given access to common resources. If society identifies maximum acceptable impact it should be left to industry to document that outcomes are within acceptable impact limits – as is done in other sectors.

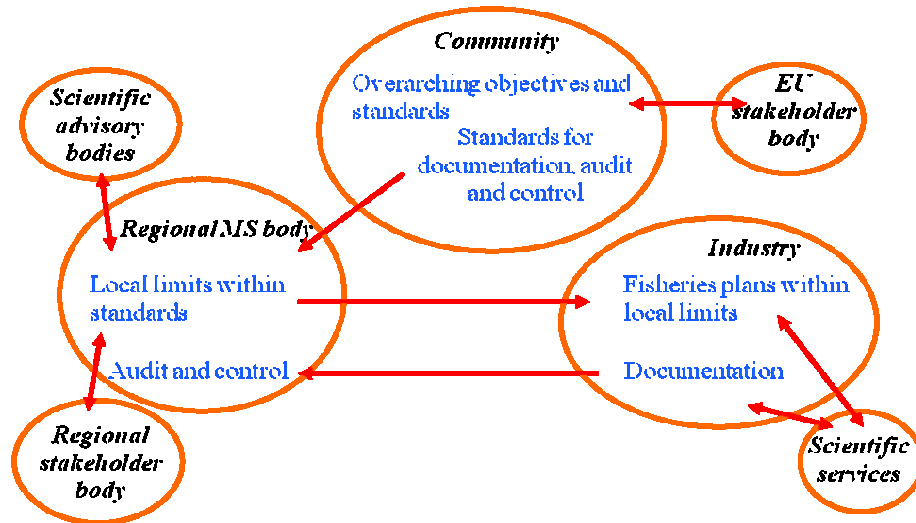
2.10 Results-based management would break the negative micromanagement spiral and be a move away from paternalistic management. It would release the initiative for technological change to industry which could find its own economic and practical solutions. It would reverse the burden of proof - give responsibility for demonstrating outcomes to industry. And it would provide a basis for extended co-management/self-management where industry takes its own destiny into its own hands.

2.11 Results-based management and reversal of the burden of proof goes hand in hand with recent developments and policy directions:

- The ecosystem approach to management requires extensive technological adaptations to mitigate impacts
- Collaborative research has demonstrated large potential to identify options for technological change to meet multiple objectives
- There are calls for more inclusive management frameworks
- There are also calls for extended inclusion of users' knowledge
- Simplification of legislation is a must – politically and logistically
- The Lisbon Treaty will introduce co-decision which means that any changes to central technological measures will take 2 years

What are the alternatives if we want to break the negative micromanagement spiral and its consequences?

2.12 The results-based management approach might look something like this:



2.13 The options might include:

- Large scale fisheries taking responsibility individually or as part of an overall industry organisation
- Smaller scale fisheries seeking self-management through POs or similar organisations
- Collective management of quota uptake and other limits to impacts
- Documentation of total catch through voluntary monitoring

2.14 The benefits to industry might include:

- Access to rights to fish
- Market access – improved image, certification
- Gaining control of its own destiny, with dignity and respect

The issues would include:

- Relative stability?

- Safeguarding the small scale sector? One regime for all?
- Mandatory membership of self-management organisations?
- Can established rights be retracted if vessels choose not to participate?

2.15 Poul Degnbol ended his presentation with a series of questions:

- Is a change to results-based management an option for the inclusion of ecosystem concerns in fisheries management? – should we move in that direction?
- Do we need technical legislation at all if we do? – and for which specific issues ?
- If we do not change – how do we then get out of the micromanagement spiral in technical measures – and address ecosystem concerns?
- Should results-based management be linked to a reversal of the burden of proof with respect to conservation issues? Can it be implemented without such a coupling?
- What is the new role of collaborative research in results-based management?

### **3. Discussion of the Commission's ideas on Results-based Management**

3.1 Poul Degnbol was asked why he had placed relative stability at the top of his list of issues. He replied that he had not. It was just one item on a list. With results-based management here would of course be a collective responsibility to observe limits and allocation of access might therefore need revision. It emerged from the subsequent discussion that removal of the principle of relative stability was a concern for fishers. The view within the Commission that the allocation system was flawed and that quota swaps were ineffective in remedying that was quite wrong. Moreover, fishing rights had been allocated to members states, and within them those rights had now been allocated to particular fishers; effectively forever in legal terms. Such a system could not readily be interfered with. Poul Degnbol's view was that it should be possible to remove fishing rights if they were abused. However, fishers did not accept that this was possible. There was also a view that relative stability, or at least the system for allocating catches within the community, was of long standing and was perhaps the only successful feature of the CFP which had stood the test of time.

3.2 Participants queried the costs of the change. Would the new system be more expensive than the old one? Poul Degnbol replied that the costs had not yet been estimated, although they would be at the later stage of economic impact assessment. Micromanagement itself was an expensive process.

- 3.3 It was pointed out that if self-management was to be accepted by the industry the benefits would need to be well defined and well presented. The proposal raised many questions. Results-based management was essentially about how things were to be done rather than what was done. Dealing with access to fishing was an important consideration and it was not clear what sanctions could be taken or what incentives could be provided. There were two key issues:
1. How do you make self-management effective? What incentives can be provided? If fishery plans meet the Commission's objectives they can be approved. But what if they don't? What sanctions are possible?
  2. How do decisions taken in one area affect those taken in another? One feature of the CFP is that there is a degree of geographical uniformity. With self-management different regimes might apply in different areas
- 3.4 There was strong concern over the impact of any new system on mixed fisheries. Under the cod recovery plan the mixed fisheries were being especially poorly managed. Discards were a big problem and arose from the setting of TACs in such a way that the fishery was limited by catches of the species with the smallest quota allocation – the lowest common denominator. Discarding of marketable fish was actually being caused by the TAC regulations. Fishers were being made to feel like criminals, within a system that was unworkable for them. There were fears that the new proposals simply involved 'passing the buck'. The Commission would still set limits which fishers would not be able to cope with. Fishers would have no say over the limits themselves. The CFP was not fit for purpose and the Commission now wished to pass responsibility for its lack of success on to fishers.
- 3.5 There was generally agreement that co-management had its attractions. We had to search for ideas aimed at passing more responsibility for management to fishers. However, this proposal from the Commission would be viewed by fishers in the context of their current experience. If the standards and principles were set too high by the Commission then fishers would be no better off. The only difference would be that fishers would be expected to tie the knot in the hangman's noose themselves!
- 3.6 Transition from the old to the new system poses challenges. The new control regulation and the cod recovery plan were part of the old paternalistic system. How could a new regime be introduced against such a rigid prevailing background? There was agreement that self-management could not be introduced as an abrupt transition. On the other hand it would be difficult to have a mix of the old and new regimes.
- 3.7 The basic regulation, introduced in 1993, had featured sustainability, multi-species and multi-annual quotas, and incentive-led management – where extra rights might be obtained in return for responsible fishing. In the Dutch system there had been important moves towards giving responsibility to fishers. There were also many examples in other member states of fishers behaving in a responsible way – for example through the introduction of real-time closures. Circumstances had begun to improve. However, very recently events had taken a turn for the worse. Fishers were discarding fish above the minimum landing size; fishers were no longer able to lease the quota and days at sea that they needed to operate successfully. That

had created resistance to the current management system. There many examples of the system simply not working. There were particular problems with the science. Some of the stocks important to fishermen did not have analytical assessments, and quotas were being set on a precautionary basis. More real-time science was required.

- 3.8 Providing proof that fisheries plans were compliant with sustainability and other objectives would be a challenge. Poul Degnbol pointed out that on the environmental side there were many private companies providing advice and willing to demonstrate compliance. There would need to be documentation of discarding, analysis of impacts upon habitats and marine mammals. Once there was a demand for such advice from the industry then scientists would come forward to provide it.
- 3.9 However, others stated that there would undoubtedly be problems if fishers were expected to pay the additional costs of management under the new system. That would only be possible if consumers paid more for their fish. The industry operated within an international market, which was currently dominated by large quantities of cheap imported fish. Fishermen did not set the price of fish and would be hard pressed to find additional money to pay for scientific advice. They were already bearing the heavy costs of certification. The North Sea fisheries needed to be re-established as profitable enterprises. Profitability was a pre-requisite if additional costs were to be borne by the industry. The CFP had not really kept pace with changes in world markets – only the supermarkets had!
- 3.10 Currently, the RACs were preparing long term management plans for their different fisheries. How would these plans fit in with a system of self-management? Poul Degnbol thought that one of the important aspects of regionalisation and self-management was the level at which plans were produced. Each region or each fishery could perhaps have its own long term plan, but this issue would need to be considered carefully. It might be too extreme. Others pointed out that the idea of fishers groups taking responsibility for preparing a long term management plan was not extreme: on the contrary it had to be a basic feature of self-management.
- 3.11 There was a big question over relations with Norway. This year, the cod recovery plan had been developed in a top-down way, with minimal input from the industry. It had become commonplace for the Commission to make all sorts of agreements with Norway without industry participation. It would be unacceptable for fishery plans agreed by the industry under a self-management arrangement to then go through a process of re-negotiation with Norway, led by the Commission. Poul Degnbol agreed that where there were third party agreements the possibilities for self-management would be more limited. However, it was pointed out that we should not now be developing management ideas and going to Norway to seek approval. Rather, Norway should be involved in preparing those plans at the earliest opportunity.
- 3.12 The chairman pointed out that the Green Paper was a discussion paper and that a system of self-management would face obstacles. There was a case for introducing it gradually and progressively as not all fisheries would be able to move at the same speed. The pelagic fishery might be able to move rapidly towards self-management but other fisheries would not. Poul Degnbol agreed that self-

management could not be introduced as a 'big bang'. Perhaps each fishery could initially be given the option of coming up with a self-management proposal to be considered by the Commission. He stressed that both the Director of DG Mare and the Commissioner himself were very keen to see the removal of the current micromanagement system and its replacement by something better.

- 3.13 It was pointed out that there were often unintended consequences from changing rules and systems. An effective self-management system had developed in the brown shrimp fishery in the Waddenzee. However, those fishers had now been accused of operating a cartel. There were often other legislative responsibilities to fulfil, outside the CFP. And who would the fishers in a self-management system get their responsibilities from: the Commission, the Council or their own member states? Fishers in the Skagerrak & Kattegat, with support from the NSRAC, had been very forward looking in coming forward with fishery plans for the area, but their proposals had been rejected.
- 3.14 It was agreed that proposals for individual areas or fisheries should now come forward for detailed consideration. We needed to look at existing examples to see how self-management might provide a better alternative. That would be necessary if we were to carry people along with us. Currently, fishers did not know what the costs of the change would be for them. They needed to be shown clear examples of the benefits which self-management would bring.
- 3.15 It was considered that the Green Paper was very bleak in its diagnosis of the CFP. A great deal had been achieved since the 2002 Green Paper, which itself had been very forward-looking. The views expressed in the new Green Paper and by the new Control Agency were too pessimistic. Many of the problems encountered had been of the Commission's own making. Moreover, we had until 2015 to implement the requirements of Johannesburg and had already made significant progress in that direction. Poul Degnol disagreed; European fish stocks had been over-fished since the 1980s. We could not wait until 2015 before solving the difficulties.
- 3.16 The chairman suggested we now needed a period of choice, where fisheries groups could opt for self-management and be provided with incentives to enable them to do so. They could for example be released from the restrictive burdens of the control and technical measures regulations in return for adopting a progressive and well-targeted management plan. A change in culture could readily be achieved if there were incentives for doing so. However, there was still an issue over which body the fisheries group need to reach agreement with. Would it be the regional management body? Who would be represented on that management body? Who would have the power to take a decision? Poul Degnol said that there had been speculation within the Commission about the extent to which powers could be delegated. The lawyers said that delegation was only possible to the member state level. On that basis a regional management body made up from member states would have the authority. The preparation of long term management plans could be the responsibility of fishery groups within that area – perhaps through an extended role by the POs. In response to a question about what would be considered a regional level Poul replied that this would have to be a regional seas level. It was pointed out that the way POs are currently structured would not allow many of them to play the role envisaged for them. They would in

any case soon lose their reason for existence because of market issues and the review of EU marketing arrangements.

- 3.17 There was clearly going to be a capacity problem for those engaged in the fisheries. The infrastructure was not currently available to fulfil any expectation of dramatic change. There might be a possibility of diverting EFF money to improving the infrastructure but otherwise there were no resources available. It was also pointed out that the idealistic aims attached to self-management might not be achieved in practice. The Shetland Shellfish Management Organisation managed some of the inshore shellfisheries around the islands but although it had been in operation for more than a decade there were still problems – mainly over limiting access and the provision of fishing rights. The extent to which allocation of fishing rights should be examined in the drawing up of fishery management plans needs to be considered.

#### 4. The ideas behind Results-based Management

- 4.1 Dr Doug Wilson of the University of Aalborg presented his thoughts on complexity and simplicity in relation to results-based management. He first drew a distinction between **co-management** and **cooperative management**. The need for this distinction had occurred to him after listening to views on the role of the RACs. A **co-management** system involved government working with fishers. In one of the oldest examples of a co-management system – the Regional Fisheries Management Councils in the US – NGOs and other stakeholders had not been involved. However a series of legal challenges from the NGOs had almost brought the management system to a halt. There was a need to involve the environmental NGOs, and to have broader stakeholder objectives. This led to **cooperative management**. In his interviews with RAC members it had emerged that the NGOs believed they were working in a cooperative management context. Fishers however viewed the RACs as co-management bodies.
- 4.2 We currently had a single management body where scientists were describing scenarios to stakeholders (in this case the Commission and Council), and through this interaction a set of management options were being identified. There were mechanisms for internal transparency; there was also mutual understanding of standards for review, how to handle uncertainty, and requirements for consistency. A subculture of mutual accountability had developed which was opaque to outsiders.
- 4.3 With the setting up of the RACs the system had changed. Scientists were excited at working with fishers towards agreeing what was true. Then interactions had resulted in people learning from one another.
- 4.4 There might be three levels operating in the proposed system of Results-based Management:

The first level would take decisions on issues of ecosystem uncertainty. It would be composed of a few officials and scientists. This level would set clear and non-negotiable limits.

The second level would decide on management strategy. It would be made up of stakeholders (including member states) and scientists. It would develop simple indicators and would impose clear and non-negotiable operational constraints.

The third level would develop management tactics. It would be composed of industry, with their own scientists and economists. It would develop operational plans with clear demonstration of compliance.

- 4.5 The ecosystem level would be based on a regional sea – like the North Sea. There would be broad participation within a public process to set ecological limits

The middle level would operate at a fishery or area level. It would be a wide process, involving many stakeholders coming together to set operational constraints upon the fishery or area. The RAC could undertake this task. The fishery plans would have to be contingency based and adaptive. That is, they would have to set out what should be done if circumstances changed. There would be a need for scenario modelling and the group would develop a subculture of its own.

The third level would involve fishers, scientists and economists developing plans for meeting the operational constraints set by the middle level. It would carry responsibility for demonstrating that the fishery was operating within its limits. In return for undertaking that responsibility it would be given high level rights to exploit the fishery. It would carry responsibility for ensuring compliance with the fishery plan.

## **5. Discussion of Doug Wilson's ideas**

- 5.1 There were questions about the degree of coincidence between this three level model and the model proposed by Poul Degnbol. How did the two models compare? Doug Wilson replied that his model was an abstract one. His upper level would correspond with the Community level in Poul's model, with the Commission and Council setting the overall ecosystem limits. The middle level would be the level of a particular fishery – like the herring fishery – or an area like the Skagerrak/Kattegat. Mixed fisheries would have to be managed on a regional basis. There might be a lack of correspondence between the Wilson and Degnbol models at this level as the Wilson model would point to the need for more RACs.
- 5.2 Concern was expressed over the proposal that there should be more RACs. The current RACs were finding it difficult to operate with their limited infrastructure and funding. Smaller RACs would find it even more difficult to operate effectively.
- 5.3 There was also the concern expressed earlier that such a system would bring few benefits to fishers but would impose a much heavier burden upon them. The system would also bring the same problems as the current system. If the Commission set the bar too high then it would be impossible to jump over it. The

middle level would be unable to cope with the limits placed upon it. Doug Wilson replied that anything was better than leaving it to Brussels to micromanage the fisheries.

- 5.4 There was particular concern over the theoretical nature of both the Wilson and Degnbol models. We needed concrete example of how such systems would resolve some of the fishery problems we currently faced. Otherwise we would not be able to explain the proposed systems to fishers and members of the public. There was also the question of where economic and social issues would be addressed. Sustainability not only required an appropriate institutional framework and consideration of environmental issues; it also needed to address economic and social issues. Could this be achieved at the highest level?
- 5.5 Doug Wilson agreed that these frameworks were not ready to roll out yet. The top level of course had to consider the economics of fisheries; the ecosystem approach required consideration of economic and social matters. However, fishers themselves also had to be involved in any discussions of economics. The important distinction was that the highest level should not consider the individual fisheries. That was for the middle level to deal with. The top level was concerned with setting targets for protecting ecosystems. It was suggested by others that the lowest level would decide upon annual rules for the fishery. It would be able to take account of market conditions and other economic issues.
- 5.6 It was pointed out that the whole rationale for a Common Fisheries Policy was to deal with shared stocks. The CFP accepted that what happened in one area affected another. If the breakdown into areas and fisheries was too fine then the coordinating function of the CFP would be lost.
- 5.7 Responsibility for the provision of scientific advice would be profoundly changed under the new system. There would be two types of scientist. Those who advised the Commission (and worked for the regulators), and those advising fishers and other stakeholders (and worked for their clients). The current degree of cooperation might be lost. Doug Wilson said that collaboration between scientists and fishers was important, especially with respect to dealing with uncertainty.
- 5.8 Did the industry have the capacity to deal with these new requirements? How would the industry demonstrate that a fishery plan met the requirements set by the levels above? Doug Wilson pointed out that in Canada private monitoring companies are licensed and audited by the authorities. They are paid for by the industry and report to a community monitoring board.
- 5.9 The chairman asked where we should go from here. There were two levels at which we might respond:

Firstly, we needed to develop a view on the approach we would like to see, taking account of the various points made during the discussion. A short paper from the rapporteur would give us something to discuss at the Demersal WG in terms of generating a response to the Green Paper. There was enthusiasm for a move away from the current system of micromanagement, tempered by concern about how self-management would operate at a practical level.

On that more practical level, we needed to consider examples of fisheries and areas where self-regulation might have an important role to play. We already had some examples of self-regulation, in terms of the POs managing quotas, fishers agreeing amongst themselves to Real Time Closures, and fishers developing individual vessel cod avoidance plans. How could we build on these examples? We needed to consider what a fisheries plan might include. We could then perhaps move towards developing a number of pilot projects in which the principles of self-management could be implemented in return for relaxation of the control and technical measures regulations and of effort controls.

- 5.10 Doug Wilson said that a consortium was being put together to apply for Community funds to develop a series of pilot projects. That group would be interested in working with the NSRAC.
- 5.11 There was general agreement that we would not be able to come to grips fully with self-management until we had considered examples of how it might work in practice. What were the advantages and disadvantages? Our main concern would be how to explain these proposals to fishers themselves. There were already a series of questions posed within the Green Paper itself and we would need to address those questions and build up clear ideas from there, so that we could get permission from the industry to go ahead.
- 5.12 A starting point might be the long term management plans for different fisheries which we and the other RACs had already started to develop. The draft *Nephrops* Plan prepared in Edinburgh (available on the NSRAC website) had already set out the main issues for that fishery. The rapporteur would outline the main framework of that plan for the Demersal WG to consider. We might also look at the fisheries for *Crangon* and for flatfish, and also consider a fisheries management plan for the Skagerrak/Kattegat. It was only by discussing issues like rights of access to fisheries, especially in the context of relative stability, that we could understand the implications of self-management and take things forward.
- 5.13 It would also be useful to look at fishery management plans for other fisheries in different part of the world and to consider the outline of a typical plan (Rapporteur's note: several examples are attached to this report). We needed to discuss with the Commission what might be included in such a plan, and how auditing and monitoring might be achieved. We had to anticipate the questions that ordinary fishers might ask and seek to answer them. Such plans had to be achievable, not theoretical, bringing simple results quickly, operating on a 3-5 year timescale.
- 5.14 There was some discussion of how we might present the concept of self-management to fishers through things like 'galley talks'. We could point to the current complexity of the regulations and controls, the inevitability of discarding under the current regime, and stress the urgent need to deal with the problems of multi-species fisheries which were poorly dealt with under existing arrangements. We should be considering management arrangements which recognised that fishers had only limited control over what came up in the net.

## **6. In attendance**

Barrie Deas	Chair
Tony Hawkins	Rapporteur
Neils Wichmann	Danish Fishermen's Association/NSRAC
Pim Visser	EAFPA/NSRAC
Peter Breckling	German Fishermen's Association/NSRAC
Willem de Boer	Dutch Fishermen's Association/NSRAC
Paola den Hartog	Dutch Fishermen's Association/NSRAC
Leslie Tait	Scottish Fishermen's Federation
Luc Corbisier	Foundation for Sustainable Fisheries Development
Caroline Gamblin	French Fishermen/NSRAC
Giles Bartlett	WWF UK/NSRAC
Marie Emilie Guele	WWF European Policy Office
Poul Degnbol	Scientific Adviser, DG Mare
Doug Wilson	University of Aalborg
Simon West	Defra, UK
Isabelle Viallon	DG Mare
Christine Rockmann	IMARES

# Annex I

## **Draft response to the proposals for self-management in the Green Paper; for consideration by the NSRAC Demersal WG**

1. There is cautious support from the NSRAC for the proposals for self-management put forward in the Green Paper. There is certainly a strong wish to move away from the current top-down system of micromanagement by the Commission and support for the transfer of responsibilities to the regions, member states and the fishing industry, with only central rules determined by the Commission.
2. A system of management is required which is able to simplify the existing complex array of regulations and controls and allow fishers to pursue their main occupation of fishing. Moreover there is a strong wish by the fishing industry to move away from the high levels of discarding which result from the inability of the Commission to deal properly with mixed fisheries. Fishers themselves have pointed out that they have limited control over what comes up in their nets. They have already come forward with their own proposals for achieving more sustainable fisheries; but these have not been developed further with the Commission. The NSRAC welcomes any move which will allow stakeholders to develop their own plans for improving the management of the North Sea fisheries.
3. Enthusiasm for self-management is, however, tempered by a number of concerns. The main worry is that the Commission simply wishes to 'pass the buck'. That the Commission does not really intend to convey new powers to stakeholders, but is seeking to pass responsibility for the failure of its own management system on to others. If the rules and limits imposed centrally by central European institutions are too harsh, no system of management will be able to cope.
4. There is particular concern over the costs of self-management to the fishing industry. A system is envisaged where it would be the responsibility of stakeholders to prepare their own fishery management plans, obtain their own advice from scientists and economists, and take responsibility for monitoring and auditing the performance of their fishery. The fishing industry cannot duplicate or replace the resources available to the Commission and member states, which currently perform these tasks. It is said that there are many private companies able to providing advice, audit the fisheries and demonstrate compliance. However, they would have to be paid. The fishing industry does not set the price of fish – that is dictated by open markets currently dominated by large imports of cheap fish from elsewhere. The industry would be hard pressed to find additional money to pay for new infrastructure. Fishers are already bearing the heavy costs of certification. The North Sea fisheries need to be re-established as profitable enterprises before they are able to bear additional costs. Financial support will be required from the Commission and member states.
5. Removal of relative stability is a concern to the fisheries sector. It is appreciated that within any self-management system there may be a need to re-consider

access to fishing, and to decide whether additional access might be used as an incentive, or withdrawal of access as a penalty. However, the system for allocating catches within the Community is of long standing and is perhaps the only feature of the CFP which has been successful and stood the test of time. Access to fishing has been divided up between members states, and within countries the rights to access have now been allocated to particular fishers or groups of fishers; effectively forever. Legally, and in terms of human rights, such a system cannot readily be interfered with. Where there is mismatch between fishers' and member states' allocations and their requirements the system for swapping quotas works well.

- Currently, the RACs are preparing long term management plans for their different fisheries. How will these plans fit in with a system of self-management? The preparation of fishery management plans, put together through the involvement of all stakeholders, is a basic and essential feature of self-management. One of the important aspects of regionalisation and the introduction of self-management is therefore defining the level at which management plans are produced, and then sanctioned. We can envisage a system where long term management plans are produced by a body at the regional seas level, and approved at the Commission level. At the same time we can envisage that individual fisheries, and perhaps areas with mixed fisheries, might wish to prepare shorter term, adaptive, operational plans of their own for approval at the regional seas level (see Figure). The meshing of these different levels of operation will need to be discussed in some detail.



Figure: Possible overlap of responsibilities

7. The NSRAC will be able to contribute to this process of management planning by developing further its own long term management plans, and then breaking these down into operational plans for different fleet sectors.
8. There will be uncertainty over deciding an appropriate geographic scale for self-management units. Decisions taken in one area or fishery may affect those taken in another. One aspect of the CFP is that there is a degree of geographical uniformity. The whole rationale for a Common Fisheries Policy is to deal with shared stocks. The CFP accepts that what happens in one area affects another. With self-management, very different regimes might apply in different areas or in adjacent fishery units. If the breakdown into areas and fisheries is too fine then the coordinating function of the CFP will be lost.
9. There is concern over interactions with Norway and other third parties in the preparation of fishery management plans. It has become commonplace for the Commission to arrive at agreements with Norway over management plans and recovery plans with minimal participation by the RACs, the fishing industry or environmental groups. It would be unacceptable if fishery plans agreed by stakeholders under a self-management arrangement then had to go through a process of re-negotiation with Norway, led by the Commission. We should not be developing management plans and then going to Norway to seek approval. Rather, Norway should be involved in preparing those plans at the earliest opportunity. It is not yet clear whether the Commission has sufficient flexibility to adopt such an approach.
10. Transition from the old top-down system to one of self-management will be difficult. The new control regulation and the cod recovery plan are part of an older system where command and control rests with the authorities. How can a new flexible regime be introduced against the more rigid background which prevails at present? Self-management certainly cannot be introduced overnight, through an abrupt transition. On the other hand it will be a real challenge to operate a mix of old and new regimes. Not all fisheries or areas will be able to move at the same speed towards self-management.
11. Considerable progress might be made if each fishery or area could initially be given the option of coming up with a self-management proposal to be considered by the Commission as a pilot scheme. Individual fisheries or areas with mixed fisheries might present their plans for more detailed consideration. We now need a period to make choices; where fisheries groups might opt for self-management and be provided with incentives to enable them to do so. Groups of fishers could, for example, be released from the burdens of the control and technical measures regulations and effort restrictions in return for developing, with the help of others, a progressive and well-targeted fishery management plan. A change in culture could readily be achieved if there were incentives for doing so. It is only by looking at existing examples to see how self-management might provide a better alternative that we will be able to persuade fishers and other stakeholders of the benefits of self-management. The NSRAC is willing to prepare a series of proposals for consideration in greater detail. North Sea fisheries and areas for which operational fishery management plans might be developed might include:

Different components of the *Nephrops* fishery

The mixed 120mm mesh fisheries in the northern North Sea

The flatfish fisheries in the southern North Sea

The *Crangon* fishery in the Waddenzee

The mixed fisheries in the Skagerrak/Kattegat

12. The NSRAC accepts that it important to involve a wide range of stakeholders in the preparation of management plans. There is a need to find a role for all members of the fisheries sector, the environmental NGOs and local communities, and to adopt broad objectives through a process of cooperation and consensus.
13. There is an issue over where and at what level economic and social issues of the fisheries will be addressed. There are four pillars to sustainability: environmental, social and economic issues all have to be considered together within an appropriate institutional framework. It is not appropriate to delegate economic and social issues to the lowest level of management, to be considered only in day to day operational plans. Economic and social objectives must be developed at the highest level and considered alongside environmental issues in setting limits and constraints for the whole ecosystem.
14. There is concern over the theoretical nature of the current proposals. We now need concrete examples of how self-management will operate and how it will resolve some of the fishery problems we currently face. Otherwise we will not be able to explain the benefits of the proposed changes to fishers and members of the public.
15. If self-management is to be accepted by the industry and other stakeholders the benefits will need to be clear and self-evident. They will also need to be well presented.

## **Annex II**

### **Some Examples of Fishery Management Plans**

#### **1. The USA – National Fishery Management Plans**

In the USA the Magnuson-Stevens Fishery Conservation and Management Act governs management of the nation's marine fisheries. This requires Fishery Management Plans (FMPs) to be consistent with a number of provisions, including ten national standards, with which all FMPs must conform and which guide fishery management.

In developing FMPs, Fishery Management Councils have the initial authority to look at the factual circumstances, establish management objectives, and propose management measures that will achieve those objectives. The Secretary of the Department of Commerce is responsible for deciding whether the proposed management objectives and measures are consistent with national standards, other provisions of the Magnuson-Stevens Act, and other laws.

#### **Fishery management objectives.**

(1) Each FMP, whether prepared by a Council or by the Secretary, should identify what the FMP is designed to accomplish (i.e., the management objectives to be attained in regulating the fishery under consideration). In establishing objectives, Councils balance biological constraints with human needs, reconcile present and future costs and benefits, and integrate the diversity of public and private interests. If objectives are in conflict, priorities should be established among them.

(2) How objectives are defined is important to the management process. Objectives should address the problems of a particular fishery. The objectives should be clearly stated, practicably attainable, framed in terms of definable events and measurable benefits, and based upon a comprehensive rather than a fragmentary approach to the problems addressed. An FMP should make a clear distinction between objectives and the management measures chosen to achieve them. The objectives of each FMP provide the context within which the Secretary will judge the consistency of an FMP's conservation and management measures with the national standards.

#### **The National Standards**

##### **1—Optimum Yield.**

Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield (OY) from each fishery for the U.S. fishing industry.

##### **2—Scientific Information.**

Conservation and management measures shall be based upon the best scientific information available.

### **3—Management Units.**

To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

### **4—Allocations.**

Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation shall be:

- (1) Fair and equitable to all such fishermen.
- (2) Reasonably calculated to promote conservation.
- (3) Carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

### **5—Efficiency.**

Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

### **6—Variations and Contingencies.**

Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

### **7—Costs and Benefits.**

Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

### **8—Communities.**

Conservation and management measures shall, consistent with the conservation requirements of the Magnuson-Stevens Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that are based upon the best scientific information available in order to:

- (1) Provide for the sustained participation of such communities; and
- (2) To the extent practicable, minimize adverse economic impacts on such communities.

### **9—Bycatch.**

Conservation and management measures shall, to the extent practicable:

- (1) Minimize bycatch; and

(2) To the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

**10—Safety of Life at Sea.**

Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

**2. Phases and stages in the process of developing a fishery management plan**  
 (taken from *A simple guide to writing a Fishery Management Plan*, prepared by the Marine Resources Assessment Group (MRAG), London)

Phase	Stage	
<p><b>I. Preparation for Developing the Management plan</b></p> <p>Where are you now?</p>	1.	<p><b>Define</b> Define the fishery your management plan is for</p>
	2.	<p><b>Stakeholder analysis</b> Who are they and how are you going to involve them?</p>
	3.	<p><b>Situation analysis</b> What are the problems faced by the fishery</p>
	4.	<p><b>Management approach</b> What will be the management approach?</p>
<p><b>II. Developing the management plan</b></p> <p>Where do you want to be?</p>	5.	<p><b>Purpose</b> Agree the overall purpose of the plan</p>
	6.	<p><b>Goals</b> Decide on the biological, ecological, social and economic goals to achieve your purpose</p>
	7.	<p><b>Objectives</b> Define objectives for each goal</p>
	8.	<p><b>Management standards</b> Agree the reference points and indicators for each objective. What are you going to measure to show you have reached your objective</p>
<p><b>III. Developing the Management plan</b></p> <p>How are you going to get there?</p>	9.	<p><b>Management measures</b> What actions are you going to take to reach the objectives</p>
	10.	<p><b>Control rules</b> Agree a set of decision control rules</p>
	11.	<p><b>Resources</b> Decide what resources are required to put the plan into action</p>
<p><b>IV. Implementing, evaluating and reviewing the management plan</b></p> <p>How will you know you are there?</p>	12.	<p><b>Implementation</b> Make an action plan to implement it</p>
	13.	<p><b>Monitoring</b> Monitor how well the plan is reaching its objectives</p>
	14.	<p><b>Reviewing</b> Review your plan regularly</p>

### 3. Canada

Fisheries and Oceans Canada (DFO) uses Integrated Fisheries Management Plans (IFMPs) to guide the conservation and sustainable use of marine resources. An IFMP is developed to manage the fishery of a particular species in a given region. IFMPs combine the best available science on a species with industry data on capacity and methods for harvesting that species.

Each plan is different and is collected together under a set of sub-headings which differ from one fishery to another, and one region to another. DFO ultimately approves each plan.

For the Atlantic mackerel the main headings are:

2. OVERVIEW OF THE FISHERY
  - 2.1 Background
  - 2.2 Recent Years
  - 2.3 Description of Canadian Catches
  - 2.4 Participants
  - 2.5 Location and Time Frame of the Fishery
  - 2.6 Landings
  - 2.7 Landed/Production Value
3. CONSULTATIVE PROCESS
4. MANAGEMENT STYLE
5. LINKS WITH ACTIVITIES UNDER OTHER PLANNING INITIATIVES
6. BIOLOGICAL SYNOPSIS
  - 6.1 Life Cycle
  - 6.2 Interspecies Relationships
  - 6.3 Critical Habitat
7. STOCK STATUS
  - 7.1 Egg Survey
  - 7.2 Problems Caused by Oceanographic Changes
  - 7.3 Analytical Assessment
  - 7.4 Precautionary Approach
  - 7.5 Sources of Uncertainty
  - 7.6 Research and Prospect
8. CURRENT MANAGEMENT ISSUES
  - 8.1 Fishing Capacity
  - 8.2 Catch Reporting
  - 8.3 Quota Allocations
  - 8.4 Scientific Research
9. LONG-TERM OBJECTIVES FOR THE FISHERY

- 10. SPECIFIC MANAGEMENT OBJECTIVES
  - 10.1 Conservation/Sustainability
  - 10.2 International Considerations and Obligations
  - 10.3 Domestic Considerations
  - 10.4 Management Measures Effective from 2007
  
- 11. ENFORCEMENT MEASURES
  - 11.1 Overview
  - 11.2 Main Program Activities / Patrol Vessels / Air Surveillance
  - 11.3 Enforcement Issues and Strategies
  
- 12. OTHER RESPONSIBILITIES
  - 12.1 Industry / Fish Harvesters
  - 12.2 Department of Fisheries and Oceans
  
- 13. PERFORMANCE EVALUATION

## **Annex III**

### **Outline & Issues from the Draft LTMP for North Sea *Nephrops***

The *Nephrops* LTMP is based on a template derived largely from the Workshop on Long Term Management of North Sea Fisheries organised by the NSRAC, funded by Defra and held in Edinburgh in March 2006.

The plan is currently under development. The current version is available on [www.nsrac.org](http://www.nsrac.org)

#### **1. Background Information**

##### **The Norway lobster**

*Factual description of the species, its distribution and behaviour*

##### **The *Nephrops* fisheries**

*Factual description of the fisheries and the markets*

##### **Assessment of the *Nephrops* stocks**

*Description of the assessment process, including any deficiencies in the models or in the data which might render the assessments uncertain*

#### **2. Major Trends**

*Factual description of the state of the stocks and the economic conditions within the fishery*

#### **3. Mixed Fishery Considerations**

*Complications arising within the fishery from the capture of other species and how that is to be dealt with*

#### **4. Ecosystem Considerations**

*The environmental impact of fishing for *Nephrops* and how that might be minimised*

#### **5. Uncertainties**

*What is not known which needs to be known*

## **6. Defining Objectives**

*The NSRAC has proposed that LTMPs plans should embrace economic and social as well as biological objectives.*

### **Economic Objectives**

*This sets out issues like whether the fleet is the right size and has the right structure in terms of overall profitability with respect to the fishing opportunities available. It raises issues over the degree of economic stability, the state of the markets, access to the fishery and the extent to which effort should remain mobile over the different functional units within the North Sea, or be allocated by post code. How will expansions in fishing capacity be dealt with?*

### **Social Objectives**

*Issues over the impact upon small-scale fishers operating on local grounds of larger nomadic vessels.*

### **Biological Objectives**

*There is an issue over whether Nephrops should be managed by functional unit, rather than at an over-arching North Sea level. There are also issues over the methods of stock assessment. The main biological objective is to keep stocks within sustainable limits. A decision rule is required for setting the TAC, and trigger points need to be defined. For other species these rules have depended on traditional methods of assessment and reference points derived from the assessment results. However, we do not have these analytical assessments for Nephrops. However, there is scope for using a range of empirical indicators on which harvest control rules can be based.*

## **7. Instruments**

*Measures to be taken to achieve management objectives are set out as a series of options. They relate to biological, economic and social objectives.*

## **8. Timeframe**

*The NSRAC sees the LTMP for Nephrops fisheries as a gradual sequential response to risk. The plan will be responsive and adaptive, changing as circumstances change.*

## **9. Conclusions**

## **10. Review of Progress & Adaptive Management**