



Working Together to Manage the Marine Resources of the North Sea

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Lord Sewel**

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Introduction

Welcome - Lord Sewel

Conference Chairman

Lord Sewel welcomed participants to this conference, which was hosted by the North Sea Commission and funded by the UK Department for Environment, Food and Rural Affairs (Defra) with the support of the European Commission. He was impressed by the scope and scale of the conference, which had wide geographical coverage. A rich variety of stakeholders had gathered together, which suggested that the management of marine resources was increasing in importance. There was now recognition that we had to adopt a sustainable approach in exploiting the resources of the sea. We needed a proper regulatory and management framework. Stakeholder groups were already playing an important role and it had been to the credit of European Commissioner Joe Borg, who had been responsible for Fisheries and Maritime Affairs, that he had recognised the importance of stakeholder involvement in the operation of the Common Fisheries Policy by establishing the Regional Advisory Councils. Involvement of stakeholders was not an easy option. It can be uncomfortable, as everyone has to recognise the legitimate position of others and try to arrive at a conclusion. There must be 'buy-in' from all interests. Reaching a consensus view is the only way forward.

High Level Perspectives

North Sea Regions Co-operating - Gunn Marit Helgesen

County Mayor of Telemark; President of the North Sea Commission

Gunn Marit Helgesen started her speech by welcoming participants and thanking Defra and the UK Minister Huw Irranca-Davies for supporting the conference. There were 120 registered participants from eight countries present, which demonstrated the wide interest of stakeholders in working together to manage the resources of the North Sea.

The North Sea Commission has members from 8 countries round the North Sea, representing 76 regions. It was founded in 1989 to facilitate and enhance partnerships between regions to manage the challenges and opportunities presented by the North Sea.

It also aimed to promote the North Sea basin as a major economic entity within Europe, by encouraging joint development initiatives and by political lobbying at European Union level.

The EU has launched a new policy: EU 2020¹. What are the implications for the North Sea? All stakeholders must play a part in the implementation of EU 2020 if it is to succeed where Lisbon failed. It is also important that the strategy takes account of territorial cohesion and can be adapted to help unique regions prosper and grow in a sustainable way. Perhaps we should establish a North Sea 2020 to meet the challenges of EU 2020? Important questions

¹ EU 2020 is a European strategy for smart, sustainable and inclusive growth, outlined by the Commission in COM(2010) 2020

include; what are the important areas for cooperation? What are the obstacles for development? How do we promote innovation? How do we tackle climate change? How do we tackle energy challenges?

The North Sea Commission, in partnership with the Committee of the Regions, has been exploring the benefits which a strategy for our region could bring. By developing such a strategy in co-operation with all relevant stakeholders, we can bridge the gap between the EU's strategic objectives and on-the-ground implementation at the macro-regional level. Early in the process we have highlighted five key themes;

Managing Maritime Space; The North Sea is a very complex and open marine ecosystem, providing a nursery for fish and a migratory and wintering area for many species of birds. It is also one of the most heavily-used seas, supporting fishing, shipping, trade, energy, sand mining, defence and recreation. Increasing economic activity in the sea, such as growing shipping traffic and the development of offshore wind farms, is leading to more and more competition between users of the sea.

Increasing Accessibility and Attractiveness; North Sea ports are important hubs for the export/import of goods and provide access to business locations and Europe's hinterland, stimulating economic development in our region. Further globalisation of the economy and an increase in the global population is likely to increase traffic. It is essential to ensure free passage in the North Sea and good flow to the hinterland.

Tackling Climate Change; One of the main challenges facing the North Sea Region is climate change, with adaptation and mitigation measures required. Increased precipitation and flooding in the North, coupled with increased temperatures and aridity in the South will cause significant changes to both physical and human geography in Europe. Exhaustion of fossil fuels and the resulting increase in fuel prices will be another challenge for the region.

Promoting innovation and excellence; The North Sea Region is a European stronghold in relation to other regions when it comes to innovation capacity and performance. The progression towards a knowledge based society and a strong research base have enabled excellence to be achieved in sectors such as ICT, renewable energies, marine technologies and creative industries. The future challenges in this context will be to capitalise on the regions excellence and to promote and maintain innovation in existing and upcoming sectors.

Sustaining liveable communities; The North Sea is a diverse area offering both attractive natural and urban environments. The changing population structure brings with it a shift in demands which impacts upon the vitality and sustainability of communities. One challenge will be to continue to support and enhance the strengths of urban and rural areas and their mutual links on the macro regional level. In this way economic growth and attractiveness of the regions communities need to be promoted to sustain liveability.

This conference is the first of a series involving stakeholders to make these themes more concrete, and identify the priorities for the North Sea region. Today we start with the Marine

Resources theme and would welcome your views as stakeholder as to whether we need a strategy at all, and if so, on what it should focus.

Integrated Marine Management from a UK Perspective - Huw Irranca-Davies MP

UK Minister for Marine and Natural Resources

The Minister remarked that he was pleased that this conference was being held. Similar conferences - like the earlier one on Reform of the Common Fisheries Policy² - had been very helpful in focussing ideas. He was also pleased that this conference was taking place in Newcastle, the new base of the UK's Marine Management Organisation. The MMO had a wide remit, with and there was a real synchronicity between its work and what was being discussed today.

The new UK Marine and Coastal Access Act is designed to ensure clean healthy, safe, productive and biologically diverse oceans and seas, by putting in place better systems for delivering sustainable development of the marine and coastal environment. It sets a framework for marine planning and will cover all sectors, with an holistic approach to managing our seas. The first stage to the marine planning system will be the Marine Policy Statement setting out new Marine Plans. It will provide the high level policy context within which Marine Plans will be developed, and it will set the direction for marine licensing and other authorisation systems. Stakeholders will be invited to engage in this challenging but productive way forward. Consultation will take place this summer. The statement will extend from the shore out to 200 miles and it will implement the requirements of the EU Marine Strategy Framework Directive (MSFD).

A network of Marine Conservation Zones will be established by 2012, and will help to conserve biodiversity. The MCZs will protect nationally important marine sites. The Marine Conservation Zone Project concerns the selection of MCZs in English inshore waters and offshore waters next to England, Wales and Northern Ireland. Sites will be selected to protect not just the rare and threatened but the whole range of marine wildlife. The MCZs will not be no-go zones, and management measures will be decided on a site-by-site basis. There will be early engagement with all interests.

How can we engage with one another better to manage our seas? In one area, the Common Fisheries Policy, we need a forward-looking mechanism to better integrate fisheries policy with other policies. The current policy is not without faults. It has isolated fishers and the fishing industry from fishery managers. The UK response to the Green Paper from the Commission on Reform of the CFP has emphasised that if fisheries policy is not fully integrated with other policies then the CFP will fail. We can have a CFP that is joined up with other policies. The MSFD gives us a clear framework for achieving good environmental status. With a successful CFP we can look beyond fish stocks towards whole marine ecosystems. We may not get agreement on everything in reforming the CFP but we

² This conference was held on the 3rd and 4th November 2009 in Edinburgh and is available at: <http://www.nsrac.org/2009/09/inter-rac-conference-decision-making-withina-reformed-cfp/>

do agree on the need for reform. There are already many examples of good practice being adopted by fishermen. However, we now need to strengthen the fishing industries role in wider marine management. We have all signed up to care for our seas. We have an opportunity to set clear and objective priorities for fisheries management, aimed at achieving ecological sustainability.

Integrated Maritime Policy: Beyond the Blue Book - Ernesto Penas Lado

EU Commission, DG MARE

Ernesto Penas Lado thanked the organisers for inviting him to the conference. The new Commissioner for Maritime Affairs and Fisheries Maria Damanaki was not able to attend, but several representatives from DG MARE were present.

The Blue Book on Maritime Policy³ had brought together a number of policies that previously had been stand-alone and had raised awareness of the need for greater integration. Previously, different stakeholders in the marine environment had rarely met. Few would now disagree on the need for an integrated maritime policy. The next step is to move from improving awareness to delivering results.

The Blue Book had placed emphasis on the regional dimension, and for the Commission this dimension is crucial for the success of maritime policy. That regional policy is now being developed and this is only the beginning of a long and complex process. The administrative consequences of the policy cannot be resolved overnight. There is a need for administrative continuity. Commission Services had adapted to the wider policy by adopting a regional structure. The European Parliament had formed an Intergroup on Maritime Policy and many Member States had also reformed their administrations.

Where are we now in terms of implementing an Integrated Maritime Policy? The Commission has issued a report to start the majority of actions. There are six priority areas:

1. The development of integrated maritime governance
2. The development of specific instruments for integrating policy
 - a. Reinforcing the maritime knowledge base
 - b. Improving marine surveillance
 - c. Integrating spatial planning
3. The Marine Strategy Framework Directive and its implementation brings together different policies, with common objectives for the future
4. The development of strategies for sea basins – is there a demand for a common approach on maritime policy across the North Sea?

³ A Communication from the European Commission setting out its vision for an Integrated Maritime Policy for the EU: COM(2007) 575 final.

5. The international dimension – the involvement of countries like Norway
6. Contributing to economic growth; EU2020; innovation, climate change, energy.

The North Sea is perhaps the best defined sea basin, it is well contained, it has the highest rate of utilisation and the whole of the sea is being used. There is also good international cooperation, only a few non-EU countries are involved and they are working well with the Commission and member states. There are also opportunities for further development. The North Sea can provide an example of the development of Integrated Maritime Policy for others to follow.

Intergroup North Sea/Channel - Rinske Kruisinga

Vice Governor of the Province of Noord-Holland

The Intergroup North Sea/English Channel was founded in February 2009. Today, it has 21 members who represent 20 regions in 7 Member States of the European Union. It broadens the basis for a closer and deeper cooperation in the North Sea/English Channel.

The North Sea is very crowded. Above water there are shipping routes, oil and gas platforms and new activities such as wind farms and aquaculture. Under the water there is sand extraction and a complex framework of cables and pipes. And let us not forget the importance of the North Sea for fisheries. We also have to take responsibility for the environment and our coasts. The sea is important not only for our economic development, but also for recreational purposes. That is why it should be properly managed. This requires strong cooperation from national and regional authorities and stakeholders. In the low lying part of the Netherlands we have the extra hurdle of rising sea level and land subsidence.

The coastal provinces in the Netherlands have chosen a dual approach to coastal issues. We are improving both the coastal defence system and environmental and recreational quality; by strengthening our natural line of defence, the dunes, and by constructing cycling paths and footpaths in these dunes. We have come up with an innovative approach to coastal protection; an adaptive approach which makes use of prevailing conditions.

Any thought of the Netherlands probably conjures up an image of great waterworks ranging from dykes to solid structures. That image, although accurate, is no longer complete. For the past ten years we have also been working with sand in addition to clay, concrete pillars and asphalt. We are spraying sand on the beaches and in front of the coast as a coastal defence measure. The sand is mainly retrieved from the Continental Shelf and there is enough there to last us for quite a while. We refer to it as 'building with nature'. The sand build-up takes place in accordance with need. To determine this need, we monitor climate change trends and the degree of rise in sea level to make the necessary adjustments in response to these changing circumstances – that is adaptation.

In Holland we have chosen an integrated approach to coastal protection. It is an approach that is generating international attention. We have settled on a solution that not only

safeguards the safety of our inhabitants, but that also makes a contribution to quality of life, working conditions, recreation and nature along the coast.

Things that come to mind include the construction of dyke crossings, observation towers, nature areas, cycling paths and hiking trails. To accomplish all this requires close collaboration at the administrative level. We need more of this at the national and European level. There is room for breaking down barriers between the various ministries, policy departments and Directorates General of the European Commission.

Coastal regions must play a key role in considering how to deal with the challenges of the North Sea and English Channel. The interests and the challenges for the various coastal regions are the same. Besides traditional interests and challenges, there are new areas, such as tourism, sustainable use of the seas and oceans, further development of renewable energies, integrated coastal zone management and maritime research that require close cooperation in the form of a strategy on European level. To promote the development of a North Sea/Channel Strategy, the Intergroup agreed in December 2009 on a "Memorandum of Understanding" to take forward this important aim, to identify the objectives of a closer co-operation and to agree on the next steps.

The objectives are:

- Protection of the North Sea/Channel area as an ecological system;
- Adaptation to climate change;
- Use of the economic potential of the area;
- Development of maritime resources, for example maritime research;
- Transport and energy interconnections

We cannot address the current challenges alone. We, the regions, national authorities and stakeholders must work together. There are many different ways of doing this. Hopefully today we will take a major step forward in cooperation.

The Intergroup intends to work with others like the North Sea Commission to find an appropriate framework for the challenges that lie ahead. What we need to concentrate on is identifying the challenges and finding solutions connected to existing structures.

What are the next steps? One important step is the development of an own-initiative-opinion of the Committee of the Regions on a North Sea/Channel-Strategy. The President of our Intergroup, Hermann Kuhn, Member of Bremen Regional Parliament, is preparing this important opinion. A first working paper will be discussed at the meeting of COTER⁴ on the 22nd of April 2010. The final adoption by the plenary of the Committee of the Regions is foreseen for October this year. Mr Kuhn will write the opinion in close cooperation with the members of the Intergroup and the North Sea Commission.

⁴ COTER is the European Commission for Territorial Cohesion, a subgroup of the EPP Group in the Committee of the Regions; it handles economic, social and territorial cohesion, structural funds and other regional matters

Another important step is a conference on macro-regional strategies at the Committee of the Regions on April 13th in Brussels. It is organized by the Committee of the Regions in close cooperation with the Intergroups for the Baltic Sea, Danube and North Sea/English Channel. In our part of the conference, we will cooperate closely with the North Sea Commission. At that forum, we would like to discuss whether a macro regional strategy is a solution for the challenges of the North Sea and what such a strategy should consist of.

The Intergroup will also build closer contacts with the European Parliament Intergroup for Coastal Regions, the European Commission and regional and national parliaments to gain their commitment and support. A precondition for implementation of a North Sea/Channel Strategy is an agreement by the European Council on its preparation by the Commission. Therefore, the members of the Intergroup will promote and support this process within their member states.

In October 2010 the Intergroup will take part in the Maritime Open Days. There will be a workshop to discuss whether and how future funding can contribute to more intensive cooperation in the North Sea/Channel area. Our region faces many different challenges. If we want to tackle them successfully we must have a well thought-out plan. I hope and trust that today and tomorrow will bring us closer to reaching our goal.

The Marine Strategy Framework Directive - Leo de Vrees

Policy Officer, DG Environment

Management of human activities is about cooperation; cooperation between governments, local authorities, users, stakeholder groups, and international organisations. Let us start with a description of the Marine Strategy Framework Directive. Why was it created, and what are its aims, conditions and obligations? Then we can go on to consider its implementation.

Evolution of EU law to protect the seas began with legislation in many relevant areas such as urban waste water, nitrates, chemicals, protected areas. It also protected the sea from specific pressures, but it was sectoral and fragmented. For years, the EU has also been an active player in Regional Sea Conventions (e.g. OSPAR, Barcelona, HELCOM and the Black Sea). There has also been Integrated management of human activities under EU environmental law, such as the Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) Directives, the Natura 2000 network (coastal and offshore), the Water Framework Directive (2000), the EU Recommendation on Integrated Coastal Zone Management (ICZM, 2002). But there has been no legislation in place to protect all marine waters.

In 2002, the European Parliament and the EU Council of Ministers (Member States) asked the Commission to prepare a "Marine Strategy". The purpose was the comprehensive protection of all the seas around Europe. In 2005, a Commission proposal for new EU legislation came forward and in the summer of 2008, the European Parliament and the EU Council of Ministers agreed and adopted the Marine Strategy Framework Directive 2008/56 (MSFD).

This new Directive establishes a framework within which EU Member States shall take the necessary measures to achieve or maintain good environmental status in the marine environment, and this must be done by the year 2020 at the latest. Each Member State must progressively put in place its own “Marine Strategy” and they must cooperate among themselves and also with neighbouring countries; where possible within Regional Sea Conventions. By 15th July 2010 the Commission must develop criteria and methodological standards for defining ‘good environmental status’ (GES). By 15th July 2012 the Member States must describe and assess their current environmental status, determine how GES is to be achieved (with precise ecological objectives), and establish environmental targets and associated indicators. Then by 15th July 2014 Member States must establish monitoring programmes for all marine waters (adapted to the assessment of progress towards GES). By 2015 all Marine Strategies will culminate in a programme of measures towards achieving GES by 2020.

Key concepts are that there should be a regional approach specific to each sea basin; that actions should be based on existing activities developed in the framework of regional seas conventions; and that there should be adaptive management with regular review (every 6 years). The EU-level working system now in place to promote the implementation of the MSFD consists of an official committee created by the MSFD; a more open and inclusive work structure consisting of Marine Directors; the Marine Strategy Coordination Group where not only Member States but also stakeholder organisations can participate; and a limited number of working groups which will work on the issues highlighted in this presentation, including the criteria and methodological standards for good environmental status and information exchange and infrastructure.

There are eleven descriptors of good environmental status:

1. Biological diversity
2. Non-indigenous species
3. Populations of commercial fish/shellfish
4. Elements of marine food web/reproduction
5. Eutrophication
6. Sea floor integrity
7. Alteration of hydrographical conditions
8. Contaminants
9. Contaminants in seafood
10. Marine litter
11. Energy including underwater noise

In the initial phase of implementation Member States must make an assessment of their own marine waters. Those assessments are to be coordinated regionally, and updated every 6 years.

The MSFD will be the key to success of the Integrated Maritime Policy (IMP). The Directive establishes an integrated approach to maritime activities that can contribute to the success of the IMP. Its legally binding framework will benefit the development of integrated maritime tools (e.g. maritime spatial planning). It will provide a long term policy vision of the seas, and a legal basis for enhanced cooperation in marine regions. The MSFD is the environmental pillar of the IMP.

The Marine Strategies to be developed by EU Member States will apply an ecosystem-based approach to the management of human activities, ensuring that the collective pressure of such activities is kept within levels compatible with the achievement of good environmental status. It will ensure that the capacity of marine ecosystems to respond to human-induced changes (e.g. climate change) is not compromised, while enabling the sustainable use of marine goods and services by present and future generations. It will integrate environmental concerns into the different policies which have an impact on the marine environment.

This is an important time to get involved and to make sure that regional concerns and experiences are properly integrated.

Discussion

Chair: Bertie Armstrong: Scottish Fishermen's Federation

Barrie Deas of the National Federation of Fishermen's Organisations accepted the need for integration of policies, and agreed that this was best done at the sea basin level, but pointed out that there was no provision for management at a regional level within the treaties defining the EU. This was proving a particular obstacle in the way of reforming the Common Fisheries Policy. Ernesto Penas Lado accepted that there had certainly been no tradition of regional management. Two models are now being considered:

1. A regional structure for upstream implementation in policy-making. Regional proposals would be passed quickly through the normal pipeline for decision-taking. Lawyers are looking at this.
2. Concentration on the downstream part. Council and the Parliament should only discuss big things. Micromanagement must be done by someone else – for example by member states at a regional level. This second model does not exclude the first one and provides opportunities for co-decision-taking and results based management.

Lord Sewel pointed out that there were some concerns over stakeholder involvement. Some organisations, like the environmental NGOs, are campaigning pressure groups rather than joint decision-takers. Reaching a consensus with others is uncomfortable for them. Huw Irranca-Davies said that all stakeholders would have to be included. It can be done. The

development of Marine Conservation Zones within the UK was predicated upon regional partnerships. Decisions must also be based on good evidence, but everyone must be at the table, shaping the future of our seas together.

Ate Oostra of the Coastal & Marine Union (EUCC) remarked that the Marine Strategy Framework Directive was legally binding on member states. If we took the seabed; it was affected by fishing, by the extraction of sand and gravel, and by pile driving for the foundations of wind-farms. Conflicts between different activities would have to be resolved. Yet stakeholders had not so far been involved in the strategy; for example in the setting of criteria for good environmental status. Leo de Vrees said that there had not yet been discussion of the levels to be set for achieving good environmental status. It was for the member states to do this. The Commission was simply defining the descriptors at this stage. It was for member states to set the actual targets, depending on their own ambitions.

Huw Irranca-Davies emphasised that we were not starting off with a blank sheet. There has already been wide engagement – for example under the Water Framework Directive which included coastal waters. That directive had required extensive stakeholder involvement. Similar discussions would take place within Member States over the implementation of this directive.

Harald Oestensjoe, manager of the Southern Norway Trawlers Association, said that this year the Norwegian Parliament would decide whether to develop oil and gas field in the Lofoten and Wester Fjord area. This is a centre for the spawning of cod and herring; stocks which are also the concern of Iceland and countries within the EU. Surely this deserved to be on our agenda, like the proposals for development of the Dogger Bank? Gunn Marit Helgesen said that this subject might have been covered by the Norwegian Minister if he had been able to attend. Lord Sewel asked what the locus of the EU was in considering decisions by Norway which would affect EU fisheries. Ernesto Penas Lado said that the EU was not supposed to interfere in the internal affairs of other states. However these were straddling fish stocks⁵ and any effects upon them would have consequences for us. We have a responsibility to make sure that these stocks are managed sustainably. We could remind Norway of our common responsibilities.

Peter Kershaw of the Centre for Environment, Fisheries and Aquaculture Science (CEFAS) asked whether there was a role for the ‘Venice Platform’⁶ in bringing stakeholders together. The answer was that material on good environmental status had been sent out for discussion by the environmental NGOs and their representations with respect to the Marine Strategy Framework Directive had been considered.

⁵ Fishery resources that span wide areas

⁶ The “Venice Platform”, formed in 2008, is intended to offer an improved dialogue and cooperation between existing maritime, marine and coastal networks, representing stakeholders in the fields of science, technology, industry, management, policy and users of the coastal and marine environment.

Integrated Solutions

Maritime Spatial Planning - Haitze Siemers

Head of Unit, Maritime Policy for the North Sea, Baltic Sea and landlocked countries, DG MARE

The need for integration of maritime policy had already been discussed. It was now appropriate to consider the tools being developed within DG MARE to achieve that integration. Maritime spatial planning is a tool for managing and integrating the use of maritime space. A Roadmap⁷ has been prepared by the Commission. Why?

Discussions on an Integrated Maritime Policy in 2006 and 2007 had made it clear that there was increasing usage of the sea and increasing impact upon the marine environment. At the same time there was pressure for growth and development to be sustainable. Integrated planning and management of maritime activities was needed. Policy approaches had to be optimised. Stakeholders had to be brought into the process. And there was a need to achieve good environmental status in the context of the Marine Strategy Framework Directive. All this pointed towards a need to plan the spatial and temporal basis of maritime activities – to agreed objectives.

The Commission has put forward ten principles for maritime spatial planning to provide a framework for maritime spatial planning built on existing practices. There is a need for a common approach to enable member states to work together, and to do it in a joined up way within a common framework. Predictability is needed by the economic actors, extending across borders, to achieve coherent management of the whole area. The objective is to maximise the benefits of integrated management. Setting out plans is clearly for the Member States to achieve; but it must be done within an EU framework.

Discussions had been held following publication of the Roadmap. There had been much agreement. The Commission was now looking at the economic benefits of maritime spatial planning, and is trying to encourage best practice by finding pilot projects. The North Sea is shallow, well developed and has its own challenges. Reactions and ideas on maritime spatial planning will be sought from this conference. Maritime spatial planning is the tool to ensure integration in the North Sea area.

CFP and Integration, a Fisheries Perspective - Bertie Armstrong

Chief Executive, Scottish Fishermen's Federation

Bertie Armstrong intended to talk about the role of European Fisheries in an Integrated Maritime Policy. He would concentrate on Scottish problems, but his remarks would have wider applicability. Will European fisheries be an easy target, or will they be treated as a valued renewable resource? The Common Fisheries Policy (CFP) is the instrument of

⁷ The Communication on a "Roadmap for Maritime Spatial Planning: Achieving common principles in the EU" was adopted by the Commission on 25 November 2008. It provides information on current maritime spatial planning practices in EU Member States, outlines the instruments which impact upon it and sets out key principles underpinning it.

fisheries management. Fishers had established a verifiable use of the sea, with a large footprint. A chart of the movements of Scottish vessels in the North Sea shows an extensive use of space. The Scottish fishery is valued because it has a turnover of £400m (catch at landing), employs 5000 people directly in catching fish, is important to particular concentrated communities, produces an iconic product and provides a locally available renewable food resource. Multipliers give the fishery a much higher value.

Reference has been made to the need for collaboration and integration. These are not the same thing. Collaboration is evident at a number of levels and with several other sectors including the environmental NGOs. There are many examples of collaboration from the fishing industry at all levels. Most nations have a Science/Industry partnership programme – we certainly do in Scotland. We all submit data to ICES for stock assessment purposes – and complain about those who do not. We have two examples of what could be regarded as best practice in realistically defining Marine Protected Areas – Rockall and the Stanton Bank. But integration refers to potential competition. Any marine spatial plan has to resolve incompatibilities; that is the self-evident basic logic of the Integrated Maritime Policy. However, what will be the practical outcome for individual stakeholders? On the one hand we have the super economic club of the oil and gas industry, and on the other the super sexy club of the Renewables industry. And then there is fishing.

Fishermen have *collaborated* well as an industry with oil and gas producers, but they have never had the chance to *compete* on anything like a flat playing field. Renewable energy is creating an even bigger bow wave. We now have unseen but nonetheless tangible arm-wrestling between the Dogger Bank as a Natura 2000 site and the world's biggest wind-farm. Who will prevail?

The Marine Strategy Framework Directive is now seeking 'good environmental status'. That is clearly a desired output for all of us. However, what will that mean in practical terms for stakeholders like fishermen? We need to be especially cautious about the unintended consequences of regulation – we have seen too many mistakes with the Common Fisheries Policy. Some of the descriptors for good environmental status just do not fit with reality.

CFP and Integration, a Research Community/ICES Perspective - Poul Degnbol

International Council for the Exploration of the Sea

There is a need for an integrated approach to marine research and policy support. There are three areas where research has an important role to play. We must further develop fora and networks where different disciplines in marine science can interact and develop cooperation. We must also maintain and develop integrated data bases and improve access to data– at the moment scientists have to go to different places to obtain and assemble data.. And we must develop the research base to provide policy advice.

In 2008 there was a Communication from the Commission on European Marine and Maritime Research Technology and Innovation Strategy - a coherent European Research Area framework in support of a sustainable use of oceans and seas. . This had led to the

MARCOM+ initiative⁸: Towards an Integrated Marine and Maritime Science Community. This project would test various dialogue and cooperation mechanisms. It would aim at coping with complexity, reducing fragmentation and avoiding duplication in existing services. It would target the involvement of scientific stakeholders in the fields of maritime transportation; renewable energy; marine conservation; sand/gravel mining; oil & gas extraction; fisheries; aquaculture; and military defence. The consortium consisted of the:

- Coastal and Marine Union
- Community of European Shipyards' Associations (representing the Waterborne Technology Platform)
- European Council for Maritime Applied Research and Development Association
- European Aquaculture Technology and Innovation Platform
- European Fisheries and Aquaculture Organization
- Hellenic Centre for Marine Research (representing the European Global Ocean Observing System)
- International Council for the Exploration of the Sea
- Marine Board of the European Science Foundation
- Royal Netherlands Academy of Arts and Sciences (representing the European Network of Marine Research Institutes and Stations)
- Mediterranean Science Commission

Many economic sectors affect the marine environment and depend on healthy ecosystems. An integrated approach to marine environmental management is especially important. This is enshrined in the EU Marine Strategy Framework Directive. The Common Fisheries Policy would be used to support implementation of the Directive. It would be necessary to develop a scientific basis for ecosystem quality objectives, descriptors and indicators and to maintain and develop monitoring and reporting. Advice would be provided to enable management action to be taken.

In supporting integration of the Common Fisheries Policy scientific work would be aimed at:

Environment and habitats

Understanding ecosystem aspects of fisheries

Developing descriptors and indicators for fisheries impacts on target populations, fish communities, ecosystem integrity and habitats

⁸ The MARCOM+ project is aimed at integrating the marine, maritime and coastal research sectors in Europe. The goal is to establish a sustainable and long-lasting partnership forum (The European Marine and Maritime Science and Technology Forum)

Integrating considerations to achieve good environmental status in fisheries advice

Advice on fisheries measures to achieve objectives of Natura 2000 areas

Marine spatial planning

Mapping habitats, populations and fisheries

It will also be necessary to develop the dialogue with stakeholders further. To this end, ICES is holding its 14th ICES Dialogue Meeting on 'Implementing the Ecosystem Approach in the Management of Fisheries' in Galway, Ireland in October 2010.

Governance and the Role of Stakeholders in Integrated Marine Policies: the North Sea Regional Advisory Council - Hugo Andersson

Chair of the NSRAC

You are all familiar with the history behind the Regional Advisory Councils. The previous revision of the Common Fisheries Policy in 2002 endorsed the idea of involving stakeholders in fisheries management. It proposed the establishment of regional advisory bodies to achieve that aim. The North Sea RAC was the first to be formed in November 2004, following an initiative by the North Sea Commission Fisheries Partnership which had previously brought fishermen and scientists together from around the North Sea. The NSRAC now has six years of experience working on a regional seas level to bring stakeholders together to provide advice on the operation of the CFP.

The NSRAC has put a great deal of effort into preparing advice on the recent Green Paper on Reform of the CFP. It has made a strong case for improvements in governance, and in particular for regionalisation of the CFP. Management of the fisheries has to be brought closer to local conditions in the regional seas. There must also be a stronger role for stakeholders. The NSRAC wishes to see the Commission, Council and Parliament taking responsibility for overarching policy. But the burden of detailed management should fall on others who are closer to the fisheries. There is a case for a regional organisation, operating across the North Sea to carry out day to day management of the fisheries.

The NSRAC has not attempted to define the precise legal architecture for a regional management organisation. Rather, it has defined that organisation by its functional characteristics. It should:

- Have fully delegated powers to manage the fisheries of the North Sea
- Involve stakeholders fully in decision-taking
- Have direct access to scientists and other sources of expert advice
- Be able to react quickly to changing circumstances; and be adaptive
- Be efficient in the use of financial and human resources

The regional management organisation should decide on conservation measures, set quotas and other limits, and participate in negotiations with countries like Norway with shared interests. Above all it should develop long term management plans for the main fisheries. The NSRAC has also suggested that responsibility for operational implementation of management measures could be delegated to the fishing industry through sustainable fishing plans.

The NSRAC accepts that the scope of fisheries management is going to be much wider in the future. Reform of the policy must take account of pressures for an Integrated Maritime Policy and take on board the requirements of the Marine Strategy Framework Directive. There is growing competition for space and resources within the North Sea. The construction of wind-farms, extraction of aggregates and the imposition of marine protected areas to fulfil wider conservation objectives have major implications for those who have traditionally made their living from the sea.

The NSRAC would like to see full consultation on all aspects of the selection and management of marine protected areas and the approval of all industrial developments within the North Sea. There must be better coordination between member states and the European Commission, and between different national departments and ministries. So far there has been a conspicuous lack of coordination and integration, especially in the establishment of Natura 2000 areas in the North Sea. There is a need to revise European legislation in order to meet the clear need for consultation and coordination between the different parties involved.

The NSRAC has been successful in bringing stakeholders together to provide advice on fisheries management. Fishers, environmental NGOs and others are already working together to improve the fisheries and to promote sustainable use of the resources of the North Sea. The expertise developed within the NSRAC is there to take on wider challenges.

Maritime Co-operation through Shared Culture - Per Jessing

Chairman European Maritime Heritage

Per Jessing described the work of European Maritime Heritage, which encompasses the European Association for Traditional Ships in Operation. These organisations aim to make our maritime heritage visible through the continued operation of traditional vessels from different regions with shared cultures. There are eight national members:

Denmark

Finland

France

Germany

Netherlands

Norway

Sweden

United Kingdom

And two regional members:

Flanders, Belgium

Galicia, Spain

More than 500 events attract 20 million spectators a year. If participants each spend €25 per day they generate €500 million income for local tourism. The 10,000 heritage ships in operation spend an average of €25,000 each on maintenance and operations to generate €250 million in turnover for related craftsmen and suppliers.

European Maritime Heritage creates awareness of our common European maritime roots and fosters awareness of a common European identity. It also facilitates the development of tourism in the regions. It offers training in social skills and team spirit, preserves maritime skills and craftsmanship which otherwise might get lost, and produces thousands of motivated future officers and seafarers for Europe's merchant marine, ports, administrations and shipping companies.

Europe's Maritime Future is founded on Europe's Maritime Heritage. We have a shared maritime culture and must involve young people in that culture. We need seamen and seagoing folk to ensure we have a maritime future. People from around the North Sea must come closer together – it will bring immense value!

Discussion

Chair: Niels Wichmann: Danish Fishermen's Federation

A key word, used by several participants, was 'balance'. How do we achieve proper balance between the different competing policies we are being exposed to? And how will balance be achieved in an area like the Dogger Bank, which is the responsibility of several member states and for which Natura 2000 sites have been planned under the Habitats and Species Directive – but which now is apparently to become a preferred site for a massive wind-farm development?

Bertie Armstrong of the Scottish Fishermen's Federation emphasised that the Dogger Bank is being proposed as a Special Area of Conservation for shifting shallow sandbanks, which it clearly is not. There had so far been no consultation on its selection as a site, and there did not appear to be any intention of involving stakeholders. Hugo Andersson added that the NSRAC had pointed to the need for integration of the different proposals for the Dogger Bank. At first, different member states had come forward with their own separate conservation proposals. Now it was favoured for a wind-farm. The NSRAC had offered to become a meeting point for the member states for these issues, as they appeared to have difficulties in talking to one another. He was also concerned that the production of renewable energy was being deemed more important than the continuation of fishing.

Ernesto Penas Lado took exception to Bertie Armstrong's conclusion that integration invariably meant competition. His perspective was different. Competition was already out there. Integration is a tool in searching for balance. Everyone can share their perceptions on an equal footing. Niels Wichmann wondered whether the footing was equal. Who would decide on the winners and losers? The Common Fisheries Policy is a truly international policy. With other industries it is national interests which take precedence.

Haitze Siemers said that this question of who takes the decisions often comes up with spatial plans. Some areas like shipping routes can be dealt with through international organisations like the International maritime organisation. To move or change fisheries it is necessary to operate through the CFP. But many other issues are dealt with by national authorities. There are different levels of decision-taking. Niels Wichmann added that there is also the problem of dealing with third countries like Norway, the Faeroes and Iceland. In the Baltic there is Russia to consider. How do we involve them? Ernesto Penas Lado agreed that we had to involve them. The question is how? If another country was not prepared to commit to resolving a problem then how could we oblige them to do so? Should we give more teeth to international management organisations? Or more powers to OSPAR or HELCOM? This is an important question.

Niels Wichmann said that fisheries policy is run through legally binding regulations. Other areas are covered by directives, which are not always implemented in the same way at the same time or even at all in some cases! There is no level playing field between member states. Haitze Siemers thought that we have to put weight behind the directives to set in place a common understanding on, say, what is good environmental status. That is the only way to smooth the way for implementation of directives. Ernesto Penas Lado added that the CFP is a policy with full Community competence and it involves regulations imposed directly from Brussels. Other areas and other actions are managed through directives, which might be implemented only slowly. However, with the CFP, the Commission would like to move towards a more adaptable approach, matched to the different sea basins, and much less centralised – a more directive-like approach.

Ate Oostra from the Coastal & Marine Union wondered whether wind-farms could be made compatible with fishing. Couldn't the turbines be spaced to allow fishing still to take place? Haitze Siemers emphasised that one of the main benefits from integrated management was that by bringing stakeholders together we may find compatibility of activities. Wind-farms might also provide refuges for fish.

Kim Gauld-Clark from Forewind said that we are all very keen that different interests should be integrated and co-existence sought. Developers would be looking for ways to enable fishing to continue and for Natura 200 areas to co-exist with wind-farms. A balance has to be struck.

Barrie Deas was concerned that Marine Protected Areas and wind-farm developments were being promoted now, in advance of any framework for maritime spatial planning. Fishing is a dispersed activity and mapping those activities is important but has not yet been achieved. Fishers are essentially hunters and they are reluctant to provide information on a fine spatial scale. How do we achieve defensive spatial mapping to assist the industry? The pattern of

fishing revealed by VMS⁹ is also affected by the rules and regulations imposed on fishers. There are many reasons why vessels did not appear to be operating in some areas. Is there any attempt to combine these data from different member states? Poul Degnbol said that we did need to combine these data. They are now available to the scientific community under the data collection regulation and ICES is considering whether there can be a common approach for consolidating the data without compromising the interests of individuals. There are also economic drivers for decision taking by fishermen. They would be more difficult to elucidate. Bertie Armstrong remarked that if fishers handed over data it could work to their disadvantage. That is a hurdle to be overcome. Hugo Andersson said that the NSRAC had discussed these mapping issues and had aggregated some data. Haitze Siemers said that data on maritime activities was not always consistent and that some data on the environment and habitats was non-existent or stored in different places EURONET is an initiative to make data collection more organised.

Niels Wichmann ended the discussion by asking whether the North Sea Commission could play a role in ensuring integration across member states. Could it provide a forum for integration?

Sectoral Positions

Marine Spatial Planning from a Regional Advisory Council Perspective – Pim Visser & Euan Dunn

North Sea RAC Spatial Planning Working Group

The North Sea Regional Advisory Council was formed to bring forward greater involvement of stakeholders in the Common Fisheries Policy. The RACs had also helped to promote regionalisation of the CFP. There are now seven RACs, five of them representing particular regional seas. The RACs provide a unique opportunity for stakeholders to work together to provide trans-boundary advice, and they provide an untapped source of knowledge. A wide breadth of interests is represented. Two-thirds of the seats are held by representatives of the fisheries sector and one-third by other interest groups.

The NSRAC had set up a Spatial Planning Working Group soon after it had been formed. The working group was concerned with mapping areas of importance to fishing activity, looking at the interaction between fishing and Marine Protected Areas and especially Natura 2000 sites, and considering interactions between fishing and offshore wind-farm developments. The group had looked at the feasibility of producing maps of areas of fishery interest, using fishers' knowledge to validate data derived from other sources. This would enable the NSRAC to provide advice on spatial issues to ensure that fishing was integrated with other uses of the North Sea, and provide support for multi-national fisheries interests. Several data sets had already been brought together with the assistance of IMARES.

⁹ Vessel Monitoring Systems (VMS) are used in commercial fishing to allow environmental and fisheries regulatory organisations to monitor, the position, time at a position, and course and speed of fishing vessels. They are a key part of monitoring, control and surveillance of the fishing fleet.

The development of the Dogger Bank is of particular interest to the NSRAC. Three member states are proposing Special Areas of Conservation (SACs) on the bank under Natura 2000 (UK, Netherlands and Germany). A fourth member state (Denmark) had decided that the Dogger Bank did not fit any of the Natura 2000 habitats. The three separate national sites under consideration are adjacent to one another but there has been little or no coordination between member states in their designation. A key concern of the NSRAC is what management regimes will apply to fisheries at the three sites. With the current lack of coordination the NSRAC is in the position of a small herring shoal, encircled by the four predatory dolphins of Germany, the Netherlands, Denmark and the UK. They are coming at us but we have no idea when they are going to strike and in what sequence. The only certainty is that we will be eaten.

To summarise the key concerns of stakeholders within the NSRAC; we have no idea what management measures are likely to apply within the SACs and who will be responsible for the plans. We have no idea of the socio - economic consequences of closing any of the SACs (including those in new, adjacent areas) to fishing and we fear displacement of fishing effort from the Dogger Bank into other areas with higher potential for discarding (the Dogger Bank is an area with a low rate of flatfish discards).

The environmental NGOs are frustrated over the slow progress of the Dogger Bank SACs. There is a fear that Governments and their agencies will shrink the boundaries or drop sites altogether and that management needs to address site restoration rather than just maintaining the status quo.

The UK Marine & Coastal Act will also add to the Natura 2000 network of sites, and there will be intense pressure upon the NSRAC to inform site selection through the provision of data to government agencies in the next six months. That information includes national data on numbers and types of vessels & gears, target species, and fishing effort and its spatial and temporal distribution. There is also a need to assess the economic value of fishing activities.

Now, following the announcement of a large wind-farm site in the UK sector of the Dogger Bank, the NSRAC is faced with a new challenge. Eighty percent of the target energy developments listed in Round 3 of UK's offshore wind-farm programme is sourced in the NSRAC region. The Dogger Bank development has the potential for a major displacement of UK, Dutch, Danish, Norwegian and French fishing effort into adjacent areas. The Dogger Bank development zone proposed by 'Forewind' also overlaps most of UK's draft SAC.

The development of initiatives in the North Sea, and the Dogger Bank in particular, shows minimal coordination of planning between EU member states, in contravention of the Commission's ten key principles for a common approach to MSP under the Integrated Maritime Policy. There is an urgent need to scale up regional initiatives to the whole of the North Sea in a way which protects fishing space as a legitimate activity. As a trans-national stakeholder body, the NSRAC can assist cross-border cooperation, and promote coherence. At the moment, the NSRAC priority is to increase its own capacity for translating knowledge into operational value (e.g. by analysing VMS and mapping fishing activities). The NSRAC is willing to help in solving difficulties, but at present has limited resources and limited capacity to do so.

The Future of the Oil & Gas Sector in the North Sea - Paul Dymond

Operations Manager, Oil & Gas UK

Oil and Gas UK is the leading representative body for the UK offshore oil and gas industry. It is working to promote and strengthen the long-term health of the Industry. The organisation represents operators, non-operators, contractors and suppliers and speaks for the whole sector.

The oil and gas industry still has great economic importance to the UK and is a major employer. It is currently supplying 2/3rds of the UK's primary energy needs, meeting 97% of UK oil demand and 73% of UK gas demand. It is also an important export business and a world leader in high-tech engineering and offshore energy services such as sub-sea systems. The European Economic Area is the 4th largest oil and gas producer in the world, ahead of Iran, Algeria and Canada; indigenous EEA/EU production is an important contributor to EU security of energy supply. Approximately 90 % of EU reserves are located offshore. The UK has produced 39 billion barrels of oil and gas to-date and up to 25 billion more are still to be recovered. The investment outlook is good and likely to rise. In 2010-2020 £60 billion is to be invested in oil and gas, comparable to the proposed investment in wind-farms.

Global demand for energy is increasing steadily. Wind, solar and bio-fuels are expanding rapidly: but from a very small initial base. Oil and gas will remain the primary energy source for many years to come. In the UK, even as we head towards a low carbon economy, oil and gas will account for 70% of our primary energy needs in 2020. Oil remains the key feedstock for the materials needed in modern life – “it is not just about energy”. Oil demand is expected to remain around 13m barrels per day, slightly falling to around 10 mbd towards 2030; gas demand expected to rise by about 17.5% from 2007 and 2030. Oil and gas production from the UK continental shelf is expected to fall gradually in future years.

In terms of stakeholder issues, safety is considered paramount by the industry. Many lessons have been learned which can be passed on to others. In terms of environmental impact the industry is regulated by OSPAR decisions and recommendations and by EU Directives, but the industry also has its own internal systems. There has been a progressive reduction in the number of marine oil discharges.

The sharing of common waters between the oil & gas industry and the fishing industry requires good working relationships and attention to potential interactions, especially with respect to safety. The UK oil and gas industry, through Oil & Gas UK, has taken positive steps to develop methods and systems that allow both industries to work safely and efficiently together and to promote harmonious working relations. There is an un-attributable compensation fund which provides redress to skippers for loss or damage to fishing gear caused by oil-related debris. A Fishing Legacy Trust Company has been set up and the industry continues to invest in FishSAFE¹⁰.

¹⁰ FishSAFE is an electronic system which protects fishing boat skippers in the North Sea, warning them of approaching hazards and clearly displaying where surface and subsea oil and gas structures are located.

Some new petroleum production licences overlap with wind-farm lease zones, providing a strong case for better spatial planning, good working relationships and meaningful consultation. The view of the oil and gas industry is that we must continue to allow access for Exploration & Production activities in the North Sea and continue to promote recovery of new hydrocarbon resources. There must be recognition of the oil and gas industry's economic and social contribution. The oil and gas industry can continue make a major contribution to secure energy supplies. Marine spatial planning at an EU level is only required where conflicts arise – the oil and gas industry actively maintains good relationships with other sea users. In general marine spatial planning should be the responsibility of member states. It must take account of possible future technology developments and any proposals must be subject to thorough stakeholder consultation.

Marine Renewables and Integrated Planning - Mike Neilson

Director, Marine Scotland

Mike Nielson was looking at Marine Renewables from the standpoint of a government responsible for marine planning. It would have been nice to have had a marine spatial planning system set in place before the renewable industry had come along. We were now trying to introduce a system a planning as the industry begins to develop and expand.

Scotland has responsibility for planning out to the Scottish fisheries limit of 200 nautical miles (which does not include the Dogger Bank). This covers a large area in which there are many competing uses. Some activities stay in one place, while others like fishing are mobile. Overall, there is a need also to look at nature conservation aspects. The Scottish Government is looking for an integrated approach which is plan led, engaging all stakeholders, with streamlined licensing. A new integrated government department has been established - Marine Scotland.

Some activities can be covered by member states. Other activities affect other member states and that is where trans-national cooperation is required.

The new emerging Renewables industry offers great opportunities. Scotland has 10% of Europe's wave stream potential; 25% of Europe's tidal potential; and 25% of Europe's offshore wind potential. There will however be competition with ferry routes and shipping, environmental implications, and concerns from the fishing industry. The core approach will be to apply the tools of marine planning, with full environmental assessment, streamlined licensing and a risk-based approach.

Ten offshore wind-farm sites have been identified in Scottish waters by the Crown Estate, which leases the seabed. It is likely that there would be more sites in future rounds. A further 10 areas might be leased for tidal energy, some of them in the Pentland Firth. Marine Scotland has been looking at mapping the areas concerned. It will be important to reconcile these new activities with the existing activities of fishing and shipping, both of which are mobile and trans-national.

The intention is to streamline licensing to reduce the burden for developers. Development of wind-farms involves the application of standard technologies. Wave and tidal energy

required the development of new technologies. For both types of development we do not know enough about the environmental impact, which will depend on the type of device, the location and scale of development, and the degree of environmental sensitivity. A risk-based approach will be adopted.

The challenge posed by Renewables is pushing us to tackle difficult issues. In general, having a plan is better than not having a plan! We need to talk early and talk lots. We should not let complexity prevent progress. We must learn to take decisions with imperfect information – that is where risk management comes in. And integration is needed at all levels- from the EU Commission down. There is a role for an international forum to resolve trans-boundary problems.

Offshore Wind Energy - Chris Westra

General Manager WE@Sea

Wind energy is sustainable. It is a solution to our energy problems, and not a problem in itself. There is potential for expansion both onshore and offshore. The industry began in shallow water in Denmark and the Netherlands, but now it is moving further out to sea. That in itself poses major technical challenges in terms of the size, technology and support structures required.

We are neighbours in the North Sea and we need to maintain good relations and work with one another. The EU began as a steel and coal community. Together we can produce lots of energy in a clean way. It is not possible to operate large turbines onshore but it is offshore. For this we will need to focus on where to put them. We will also need new support structures and new technology to enable them to be built quickly, because of the adverse working conditions offshore. The technology is not yet mature but we can learn to build larger machines offshore which are properly marinised to face sea conditions.

We perhaps lack the right harbour facilities for handling these large devices and may need new kinds of dedicated ships. The UK lacks harbour capacity and may need to build new dedicated harbours. In terms of where we put the wind-farms, the Netherlands has already had two rounds of awarding leases, but close to shore where there are conflicts with shipping lanes. Now the industry will have to move to deeper water. There was a proposal for a Dutch site close to the one already built off the coast of Belgium, but concern had been expressed over the impact upon birds. Other areas are now being investigated.

As we move offshore there may be a need for special islands in the sea for building and maintaining wind-farms, where we can build and assemble machines and then take them to foundations close by. These islands will extend the weather windows. Large transformer stations can be placed on the islands. The requirement to generate 72,000 MW of offshore wind energy means more than 12,000 wind turbines (of 5 -10 MW), spread over an area of 15,000 km² (125 x 125 km), that is 2% of the North Sea. That will require an investment of €220 billion and will generate 50,000 - 150,000 jobs.

There are a number of focal points for European policy. There should be a pan European offshore electricity grid – a Supergrid. There is a need to protect of marine eco-systems. A

spatial planning system is required. Support must be given to the development of new technology. And there must be a level playing field in the electricity market.

Our vision for the future is:

- The construction of new harbours to facilitate the large scale implementation of offshore wind energy at the North Sea
- Cooperation between the Netherlands, Belgium, the UK and Denmark to find strategic sites at the North Sea to build artificial islands for offshore wind power
- The development of an European offshore electrical grid

Sustainable Shipping - Captain Sibrand Hassing

Senior Policy Advisor, Ministry of Transport, Public Works and Water Management, The Netherlands.

The North Sea is one of the busiest shipping areas in the world. In the Dutch part of the North Sea there are $\approx 260,000$ vessel movements per year. Almost 52% of these ships are passing through. There are $\approx 110,000$ movements to and from Dutch ports. There are less than 25 accidents a year, leading to less than three casualties per year. Accidental oil spills affect almost $1,100\text{m}^3$. In terms of air pollution the vessels emit almost 123,000 tons of NO_x and almost 5,000,000 tons of CO_2 . However, shipping is the least environmentally damaging form of commercial transport and, compared with land based industry, is a comparatively minor contributor to marine pollution from human activities. The number of oil slicks is declining, as are observations of oil pollution and the numbers of oil stained birds. The number of accidents has declined. Environmental and safety policy works! However the industry has a bad image as a result of several major incidents, including the MT BRAER, off the coast of Shetland in 1993 when 85,000 tons of oil spilled into the sea and the MT PRESTIGE, off the coast of Spain in 2002 when 77,000 tons of oil spilled into the sea.

Future developments include reductions in air pollution, the design of sustainably powered ships using sails, solar panels, and reduced emissions of gases. There is a role for many parties in achieving sustainability including ship-owners, seamen, cargo owners / shippers, the shipbuilding sector, naval architects and also ports. Users of ships want them to be green and sustainable, but that usually involves additional costs.

Standards are getting higher. Air quality has to conform to stringent MARPOL Annex VI requirements which are coming into force. Ballast water management requirements were adopted in 2004 and are awaiting ratification. Reduction of Greenhouse Gas emissions are under development. A Convention on Ship Recycling has been adopted and is awaiting ratification. A requirement for Marine Environment Awareness training for seafarers will enter force in January 2012.

North Sea Clean Ships Action Plan - Tom-Christer Nilsen

North Sea Commission Marine Resources Group

Hordaland County Council is taking part in a programme to promote clean North Sea shipping. Bergen, in Hordaland, is the largest Norwegian harbour, accommodating more than 300 major cruise ships a year. It forms a maritime cluster of ship owners, managers, and shipyards. However, the area is suffering because shipping is a major contributor to atmospheric emissions. This is in part because of the geography. Bergen and the fjords of Hordaland, like Geiranger fjord, tend to accumulate emissions.

If we look at emissions from ships, one Cruise Ship over 24hrs is:

- Comparable to 5,000 cars in terms of CO₂
- Comparable to 144,000 cars in terms of NO_x
- Equivalent to particle emissions from up to 7.5 million cars

One Offshore Supply Vessel in 24 hrs gives emissions:

- Comparable to 1,000 cars in terms of CO₂
- Comparable to 30,000 cars in terms of NO_x
- Equivalent to particle emissions from up to 1.6 million cars

Ships are efficient when they are travelling, but they are not efficient when they are in port.

The ship owner and shipping customer are currently facing rising fuel costs due to sulphur oxide (SO₂) regulations and tightening emission standards, and there are no standard solutions. Ports are facing problems with pollution from NO_x, particles and sulphur, with high costs for implementing solutions. They also have to ensure that clients will come to port, although they are facing increasing pressure from environmental legislation. The solutions include:

- Cold Ironing – providing electrical power within the port
- Mobile Frequency/Voltage Converters to match electrical supplies to different ships
- Liquefied Natural Gas as a power source
- Biogas as a power source
- Fuel cells
- Incentives to reduce emissions

There are very high costs to achieving environmental abatement. Nevertheless we should be seeking common standards across Europe

Discussion

Chairman Darius Campbell, Defra

Many issues have been discussed in this session with strong emphasis on sustainability and environmental aspects. It is apparent that there are conflicts within the North Sea. How do we integrate different activities right from the beginning?

Bertie Armstrong replied that we should be critical of the Third Round of licensing of wind-farms by the UK. This gave security to developers which cut right across the whole idea of integrating activities. Now we could only discuss mitigation measures. The whole stage of risk analysis has been omitted.

Kim Gauld-Clark of Forewind responded to the question from the chairman by pointing out that National Policy Statements and the Infrastructure Planning Commission¹¹ would determine whether new developments like wind-farms are granted consent. Bertie Armstrong's concerns were unfounded. Impact on all potential receptors will be considered by the IPC. If the harm outweighs the benefits then applications will be refused

Paul Dymond emphasised that zoned areas might be set out to give developers exclusive rights but no leases could be taken up until planning permission had been granted by the IPC. There would be full and meaningful consultation. Mike Nielson said there were differences in Scotland; there the Scottish Government would take the final decision on major developments. There was still a need to get the balance right between the benefits of a development and its adverse impacts

Pim Visser said that the problem was with the sudden leap forward in scale. Risk assessment required time and full consultation with affected parties. Michael Park of the Scottish White Fish Producers' Federation thought that each sector had laid out its own plans without real regard for other sectors. What can we put in place to pull things together? Pim Visser suggested that we start with inter-sectoral bodies which could pull together the information available, but who would sponsor these bodies? The NSRAC existed to bring together only those concerned with fishing.

Mike Nielson pointed out that there were a number of levels to consider: local; regional; national, European and international. Some things could be handled quite effectively at the local, regional and national levels. Planning within the UK was well in place at those levels. However, we all recognise that there are some issues, like the Dogger Bank developments and any fish spawning grounds affected by development, where a wide range of nationalities had an interest. We need cooperation across member states to achieve integration with these issues. The Common Fisheries Policy illustrates this. In Norway, Tom-Christer Nilsen was waiting for a national plan on managing the sea. There has to be a good national framework. Pim Visser agreed with Mike Nielson that the CFP is not local; it applies over the whole North Sea – but only for fisheries. Other sectors lack international coordination.

¹¹ The IPC is the fast-tracking body that decides applications for nationally significant infrastructure projects in the UK which might otherwise provoke public opposition and delays through normal planning procedures. These are large and often controversial projects including railways, large wind farms, power stations, reservoirs, harbours, airports and sewage treatment works.

Chris Westra thought many problems were being dealt with satisfactorily; for example safety problems on platforms and ship safety. Wind farms would only take up a small part of the total area of the North Sea. Shipping could live with this. Coastal birds might be affected, and there would be an impact upon fishing. Developers would have to talk to fishermen. Paul Dymond thought that multiple layers of government might get involved and this would raise difficulties. However, different sectors must talk to one another.

Barrie Deas contrasted the two industries which interacted with fishing. Both the oil & gas and wind-farm industries had the potential to displace fishers. The former had engaged closely with fishers over many years. The Renewables sector was expanding very rapidly, but had yet to engage face to face with the fishing industry. So far there had been no pressure for developers to talk to fishers. Building a system of marine spatial planning would depend on existing structures. Should we be considering current best practices and replicating them in other sectors?

Ernesto Penas Lado said that there was a consensus over the need to integrate policies, and to have a system of maritime spatial planning. The discrepancy in our discussion was over the appropriate level. Some preferred national decision-taking. Others looked for transnational solutions at a higher level. Is planning at the national level and at lower levels enough? When do we need to involve supra-national bodies? And how do we achieve implementation?

Chris Westra suggested that the development of the Dogger Bank brings out the need for supra-national arrangements. The area cannot be managed at a national level. Paul Dymond drew attention to the Fisheries Legacy Trust Fund established by the oil and gas industry. This would maintain a data base in perpetuity. There were more than 400 oil and gas installations in the North Sea and these were mapped and information could be sought from a website. Perhaps similar instruments could be used by the wind-farm industry.

Tom-Christer Nilsen said that it was obvious that transnational solutions would be required to resolve some of the difficulties. We need a North Sea wide solution. He also contrasted the profitability of wind-farms with oil and gas developments. Wind-farms are less financially viable and their development requires incentives. They are subsidised rather than contributing to tax income. The Renewables industry might not have the financial resources to bring in other interests in and resolve difficulties.

Pim Visser was in no doubt that additional financial resources were needed. The NSRAC had started mapping fishing activities but did not have the resources to take this further. Only a short time is allowed for fishers to respond to proposals like the new Special Areas of Conservation. National authorities would have to get together to coordinate their proposals. Mike Nielson agreed that some problems could not be managed at a national level but pointed out that achieving international cooperation is difficult. We first have to define those tasks which have to be discussed at a higher level and consider the outcomes which are needed. In terms of improving dialogue, meetings with the other sectors are in the interests of developers - otherwise they would experience risks and delays. In Scotland, the views of all users are considered relevant to decision-taking and their input is crucial.

John Jordan, the UK Interreg¹² Contact, said that there were a number of Interreg projects which were relevant to the discussion. There are projects which have the objective of clean shipping as their aim and another project to promote an energy grid. Details are on the website. Perhaps a new North Sea programme is merited?

Crick Carlton, of Nautilus Consultants thought that integration and consultation normally involved non-specialists from the sectors involved, but depended on data being provided by specialists. There is an issue over how to bring the required data together. Pim Visser remarked that funding for data collection at a European level is difficult to obtain. The European Fisheries Fund is one possible source but it is administered nationally. There is scope for forming a consortium to make a bid for European funding. Mike Nielson pointed out that some data we do not have; some we do, but it has to be pulled together. The Marine Strategy Framework Directive might make some information available, but some new data might need to be acquired and paid for. Darius Campbell said that much data was held by the private sector but there were issues over sharing it.

There was a question from the floor on whether decommissioned oil and gas sites could be used for wind-farm developments, saving space. Paul Dymond said that quite a few North Sea platforms had now been removed, but decommissioning of many sites had still to be decided. Further exploration is still underway and decommissioning would still be going on in 2040-2050. Installations were not all being removed at once. Tom-Christer Nilsen said that some of the larger concrete platforms might never be removed. They might be used for renewable energy. It might also be possible to negotiate over the use of existing power cables.

Luc Corbisier, from the NSRAC said that we knew very little about the impact of wind-farms upon fish. Serious questions were being asked about whether sandeels would remain on the Dogger Bank after the wind turbines had been installed. Some of that information would take time to acquire. Who will do the necessary research? Kim Gauld-Clark replied that the pile driving of the foundations might affect fish, but in the past wind-farms had successfully gone through the process of impact assessment. Mitigation measures would be applied; for example pile driving would not be done during the spawning season. Precedents had been established and it was hoped that fish spawning would continue. There was also a requirement for developers to maintain a monitoring programme to see whether there were any lasting effects. Chris Westra added that wind-farms might provide a refuge for fish and although pile driving might have an adverse effect there were other ways of building the foundations for wind-turbines.

In summing up the discussion Darius Campbell said that the most interesting question concerned the levels at which coordination should take place. It was evident that there were also problems in obtaining and assembling data. It had been suggested that a forum for discussion was required to bring together stakeholders from the different sectors. Ann Bell, of the NSRAC and North Sea Commission stressed the importance of dialogue and wondered whether these discussions needed to continue – perhaps under the auspices of a pilot North Sea Stakeholder Forum.

¹² The Interreg programme is part of a Structural Funds Community Initiative under the European Regional Development Fund (ERDF) initiated by the European Union

Parallel Workshop Sessions

1. The Integration of Fishing with Other Activities
2. Sustainable Economic Development of Marine Resources
3. Sustainable Shipping and Ports
4. Integrated Planning and Management of Maritime Activities, Focusing on Cumulative Effects and Maritime Safety

The Integration of Fishing with Other Activities

Chairman, Ernesto Penas-Lado, Director North Sea, Baltic Sea & Non-Coastal States, DG MARE

Rapporteur, Richard Pullen, DEFRA

With a presentation by Michael Sutherland, Fisheries Legacy Trust

Outcome of the Workshop

- How can fisheries contribute better to protection of the marine environment, while at the same time aiding economic development and helping food supplies/security goals?
 - *By promoting collaboration between sector, e.g. learning from oil & gas: the earlier the better*
 - *By recognising fishing's contribution to food security, and that it is exploiting renewable resource*
- How can reform of the CFP help further these aims? Can fishing and other marine activities co-exist and how might reform of the CFP help achieve this?
 - *Co-existence is achievable with the right attitudes and behaviours*
 - *Integration must be made an explicit objective in relevant legislation including the CFP regulations*
 - *There is a need to clarify what decisions are taken at what level*
- How can CFP governance arrangements and co-ordination with other policies be improved?
 - *Focus on outcomes rather than structures to deliver them*

- *Make it an explicit expectation that member states should collaborate on trans-boundary issues. Which scenarios and what mechanisms are needed to ensure this happens?*
- How can compatibility of fisheries activities and Marine Protected Areas be enhanced? What are the broader conservation objectives? How can fishermen contribute to the evidence base to inform us about the state of European seas?
 - *Improve the sharing of information both at the regional and member state level. Provide access to information on equal terms*
 - *Decide whether we need more than OSPAR*
- Common themes
 - *Change is here. Renewables are a game changer*
 - *Engage early – before positions are fixed e.g. Dogger Bank. This is a challenge for the fishing industry*
 - *Do not assume that different uses are incompatible – look for opportunities e.g. with wind-farms.*
 - *Get the governance right: what has to be done at each geographic/political level. How prescriptive should governance be?*
 - *Gather and share the right evidence*
 - *Be flexible – be ready to compromise*
 - *Integration should be doing things together, beyond talking/collaboration*

Sustainable Economic Development of Marine Resources

Chairman, Christian Byrith, Interreg North Sea Programme

Rapporteur, Martin Brebner, Aberdeenshire Council

With a presentation by Barrie Deas, Chief Executive, NFFO: Feedback from discussions with NSRAC and Forewind

Outcome of the Workshop

- Several issues were identified, including the need for:
 - *Trust between stakeholders*
 - *Dialogue*
 - *Coordination*

- *Maritime data sets*

A lack of coherent, verifiable and transparent maritime data provided a useful example of these issues. Stakeholders do not trust each other enough to share their own data, leading to a lack of co-ordination of activities and difficulties for policy makers to access the information required for Maritime Spatial Planning, for example. The most appropriate solution identified was to encourage dialogue between stakeholders, as at this conference.

- One solution was the establishment of a Stakeholder Forum to provide:
 - *A building of mutual trust*
 - *A platform for bilateral discussions amongst stakeholders*
 - *Dialogue*

The conference was seen as a helpful foundation to build a Stakeholder Forum for users of the North Sea and policy makers. The Forum would help to build mutual trust and facilitate discussions between stakeholders, helping to address the issues identified.

- With respect to the Stakeholder Forum
 - *Who would lead this?*
 - *Should a pilot project be initiated?*
 - *What would the outcomes of the forum be?*
 - *No political declaration*
 - *Report on issues discussed and stakeholder views*

It is important that the Forum is distinct from existing organisations (e.g. NSRAC) and should be facilitated by a neutral organisation. The North Sea Commission was identified as probably the most suitable organisation to pilot the Forum, perhaps through an INTERREG project. The NSC had previously supported the North Sea Commission Fisheries Partnership project which helped to set up NSRAC, hence it has a strong track record in this field. It was clear that the Forum should not try to reach a political consensus between stakeholders, but should instead focus on facilitating dialogue. Reports on the main issues discussed and the perspectives of different stakeholders should be produced, rather than political declarations.

Sustainable Shipping and Ports

Chairman, Ole B. Sørensen, Chair of NSC Innovation and Education Group

Rapporteur, Stuart Bews, Aberdeenshire Council

With a presentation by Mr Arvid Guthed, Port of Goteborg

Outcome of the Workshop

- What are the principle barriers for future economic development of the maritime sector?
 - *Lack of standards*
 - *Uncertainty prevents progress*
 - *No mandatory international grouping of ports*
- How can we ensure that new maritime activities co-exist and even complement traditional maritime sectors?
 - *This requires discussion between stakeholders to discuss how the use of sea can benefit all*
 - *We must look for way in which all sectors can benefit from developments in the sea – e.g. research, transferability of skills*
- What measures can be put in place to reduce the environmental impact of shipping and ports?
 - *Set minimum standards which protect the environment*
 - *Apply taxation rules which support environmental actions*
 - *Improve communication between ships and ports*
- In which ways can engagement between shipping and ports operations and other maritime activities be improved?
 - *Hold a conference to discuss sustainable shipping. Focus on common standards which will ensure discussion between ship owners and the ports.*
 - *Through planning – to link ports and land ensuring the efficient movement of goods.*

Integrated Planning and Management of Maritime Activities, Focusing on Cumulative Effects and Maritime Safety

Chairman, Eskild Kirkegaard

Rapporteur, David Palmer, Marine Planning and Policy, Scottish Government

With a presentation by Martin Pastoors, Director of Wageningen University, Centre for Marine Policy

Outcome of the Workshop

- Are there any examples of good or bad practice in implementing Maritime Spatial Planning?
 - *There are possible examples: Barrier Reef; Netherlands Natura 2000; Crown Estate Mars tool.*
 - *There are also plenty of bad examples*
 - *There are examples of good planning from industry and other sectors*
 - *What does integrated planning actually mean?*
 - *Cooperation in the Wadden sea area provides a good example*

- In which areas would a common approach to marine planning add value? Should that common approach include Norway?
 - *What is a common approach?*
 - *Commitment to the process is vital*
 - *A common approach should be adopted only if it adds value*
 - *What can not be done at a national level for MSP:*
 - *International shipping routes (IMO)*
 - *Birds and Habitats Directives/ Natura 2000 (EU)*
 - *Energy grid*
 - *Fisheries*

 - *A common approach and more harmonised management is needed for e.g.:*
 - *Environment*
 - *Energy*
 - *Shipping lanes/ wind parks*

 - *Issues more at the MS level:*
 - *Sand extraction*
 - *Oil/gas exploration*
 - *Shellfish, aquaculture*
 - *Tourism (e.g.: jet-ski, swimming, rod-fishing)*
 - *Coastal issues (more local management)*

- Summary of important conclusions:
 - *A common approach does not imply a common planning approach, as the legal systems and consultation procedures are different in member states.*
 - *It is Important to set common criteria on the basis of goal setting. (Rather than creating a common system)*

- *Identify in which areas this is needed and which not (also include onshore)*
- *Make a simple template ((inter)national overview) and identify the communication between the boxes.*
- How can we best achieve a balance in Maritime Spatial Planning structures between local accountability and co-ordination at the sea basin level, taking account of the needs of different stakeholders?
 - *Accountability is much more difficult to achieve in the maritime area*
 - *The presence of unknowns requires adaptive management*
 - *Super stakeholders - right people, right time*
- How can engagement be best improved?
 - *Should engagement be improved?*
 - *A website might be useful*

Conclusions

Summing up - Professor Anthony Hawkins

A wide range of topics have been dealt with at this conference on '*Working Together to Manage the Marine Resources of the North Sea*'. It is my task to highlight the most important ones.

We first heard from Gunn Marit Helgesen about the North Sea Commission and the essential role it plays in coordinating North Sea activities. The Commission has played a key role in setting up the North Sea Regional Advisory Council - the first of the RACs - and of course in organising this conference. One of the Commission's themes has been 'managing space'; one of the subjects we chose to focus on here.

The UK Fisheries Minister, Huw Irranca-Davies, who also sponsored this conference, told us about his government's initiatives including the production of a new marine policy statement. He emphasised the need for different sectors to engage with one another. Decisions must be based on good evidence, but everyone must be at the table, shaping the future of our seas together.

Ernesto Penas Lado from the Commission pointed to the need for better integration of existing maritime policies. One of our main actions should be to develop a more appropriate system of marine governance and to develop strategies for each of the different sea basins. The North Sea is perhaps the best defined European sea; it is well contained and although its resources are very heavily used there is still scope for further development. There is good cooperation between member states and with the few non-EU countries like Norway. The North Sea can provide an example for others to follow.

Rinske Krusinga followed this up by stressing the importance of cooperation between national and regional authorities. Rinske told us about a number of existing initiatives designed to bring people from around the North Sea together. Besides traditional interests there are new challenges, including the development of renewable energies. Developing these new interests required closer cooperation. What we need is a North Sea Strategy. The Intergroup North Sea/English Channel is to take the initiative in developing this strategy.

Leo de Vrees from the Commission reminded us of the provisions of the Marine Strategy Framework Directive, which would provide us with both opportunities and challenges. Cooperation would be needed in implementing the directive. Haitze Siemers described the tools being developed by the Commission to promote a more integrated maritime policy. A system of maritime spatial planning would provide one of our most important assets. There is a need for a common approach in planning, to enable Member States to work together in a joined up manner. Industry requires a predictable common framework, extending across borders.

Bertie Armstrong, speaking on behalf of fishers, supported an integrated approach but asked what this meant in practice. There are conflicts between different sectors in the North Sea which must be resolved. Integration is often synonymous with competition. Any system of maritime spatial planning would have to get to grips with the competition for space within the North Sea. He was also concerned about the possibility of unintended consequences arising from the implementation of the Marine Strategy framework Directive and other initiatives.

Poul Degnbol saw things from the perspective of the research community. It is important to draw together data from different sources. Research is also required to provide advice in support of new policy initiatives.

Hugo Andersson described the work of the North Sea Regional Advisory Council and the change in governance which was taking place within the fisheries sector. The NSRAC had served well in bringing different stakeholders together. Much had been achieved in a very short time and the RAC model showed how different interests could come together in a common forum. Per Jessing, from European Maritime Heritage, said that we shared a culture across the North Sea. If we could come together within our own area it would bring immense benefits.

A number of major points emerged from the ensuing discussion. One of them was how do we achieve a proper balance of activities across the North Sea, without one sector dominating another. Should we bring the different sectors together within a common forum?

How can we persuade member states to engage with one another to discuss problems extending across national boundaries? Problems have already arisen over the designation of Natura 2000 sites but member states have shown little willingness to resolve these problems. Those affected by cross-boundary problems were at a disadvantage as a result of this lack of engagement. Attention has been drawn to the differences between the Common Fisheries Policy, which falls within the exclusive competence of the Commission, where there is a common approach, and the varied implementation of different directives, which is the responsibility of member states.

There is also the problem of dealing with third countries like Norway, the Faeroes and Iceland. How do we involve them?

On one thing there is general agreement. It is better for the different sectors in the North Sea to work together, to engage with one another, than to stay apart defending their own interests.

We then heard a series of presentations from different sectors. Pim Visser told us about the work of the NSRAC Spatial Planning Working Group. It had experienced particular difficulties from the lack of a joined-up approach between member states. The NSRAC has offered to help bring member states together to discuss Natura 2000 issues, and that offer still remains open. Pim emphasised the difficulties the RAC was encountering in acquiring resources to improve information on the distribution of fishing activities in the North Sea.

We were then told by Paul Dymond about the wealth generated from the North Sea by the offshore oil and gas industry. The sharing of common waters between the oil & gas industry and the fishing industry had required the development of good working relationships and attention to potential interactions, especially with respect to safety. Both industries are now working efficiently together and have achieved harmonious working relations.

Mike Nielson, from Marine Scotland, looked at marine renewables from the standpoint of a government responsible for marine planning. Ten offshore wind-farm sites have been identified in Scottish waters by the Crown Estate, which leases the seabed. It is likely that there will be more sites in future rounds. A further 10 areas might be leased for tidal energy. It will be important to reconcile these new activities with the existing activities of fishing and shipping, both of which are mobile and trans-national.

Chris Westra informed us of the major ambitions for offshore wind power in the North Sea. He emphasised that wind energy is sustainable. It is a solution to our energy problems, and not a problem in itself. As we move offshore there may be a need for new harbours and for new islands in the North Sea, especially created for building and maintaining wind-farms. Stranger things have happened (to quote Baldrick).

There were two thought-provoking presentations on sustainable shipping. Captain Sibrand Hassing described the North Sea as one of the busiest shipping areas in the world. Users of ships and ship-owners want ships to be green and sustainable, but this usually involves additional costs. Tom-Christer Nilsen said that ports are facing problems with pollution from NO_x, particles and sulphur from ships, with high costs for implementing solutions. There is increasing pressure from new environmental legislation and we should be seeking common standards across Europe

One especially interesting comparison to come out of the following discussion was between the offshore oil industry and the renewables industry. The former had built up slowly and had engaged with the fishing industry, shipping, and environmental issues from the start. It contributes greatly to the exchequer through taxes. It is a wealthy industry which has been able to set up research funds, compensation funds, and trust funds to cover future eventualities. It has provided financial support to those affected by its activities. In contrast, the renewables industry is developing extremely quickly, on a huge and expansive spatial scale. It has to be subsidised, rather than generating taxes. It is using new and uncertain

technology. Can it afford to engage with fishers and environmental concerns in the way that the oil industry has?

Another crucial topic is how we can implement the cross-sectoral links which the conference had identified as necessary. How can we achieve integration? It was pointed out several times that it would have been nice if we already had in place a fully participative and integrated spatial planning system, with cross-boundary cooperation, before embarking upon a great programme of further development of the North Sea –in terms of both the new renewables industry and the imposition of marine protected areas. However, we do not have such a system in place. We are starting from scratch.

Mike Nielson had said that many elements of maritime spatial planning could be achieved at the local, regional and national level. It will be important to identify those activities which really require a supra-national approach. He also pointed out that some things stay in one place and can be handled locally, like fish farms, whereas others like fishing and shipping are mobile. Many of the issues affecting the latter have to be resolved at a supra-national level. There are also issues over fish spawning grounds, and diffuse pollution which require cooperation between nations. Herring and cod spawning off the Lofoten islands in Norwegian waters are exploited by fishers from across Europe, and any impact upon those spawning grounds affected a great many people.

We can conclude that although there are many things which can be managed within member states there are some things that cannot. Fishing itself is subject to the over-arching Common Fisheries Policy, which is managed by the European Commission. But the Commission has neither the powers nor the motivation to resolve other cross-boundary issues. Some problems have to be resolved by the separate countries, including Norway and the EU member states acting together, in cooperation. Yet over areas like the Dogger Bank member states have shown a marked reluctance to come together.

This is quite a serious problem, and one which will be difficult to resolve. The European Commission has said that there is a legally binding obligation for member states to cooperate. Cooperation should be taking place.

What we can do, following this conference, is to consider further the idea of developing a stakeholder forum for the North Sea, where representatives of the different sectors can reach agreement with one another and where they will also be able to draw the attention of member states to emerging cross-boundary problems. The immediate requirement is for a forum to address one another's concerns, especially over the expansion of economic and commercial activities in the North Sea. Such a forum could also look at the impacts upon all sectors of implementation of the Marine Strategy Framework Directive, the bringing forward of proposals for marine protected areas and perhaps also the compilation of data sets.

We cannot take a decision to establish such a forum here and now but we could ask the North Sea Commission to look into the implementation of such a forum, perhaps as a pilot project – with support and cooperation from the European Commission. The conclusions from our workshops will help in defining the problems which such a forum might address.

Closing Remarks – Lord Sewell

Lord Sewel concluded the conference by thanking all those who had taken part. He congratulated the North Sea Commission and Defra for having the foresight to sponsor and organise the conference, the European Commission for their full and active participation and Ann Bell, Executive Secretary of the NSRAC, for pulling everything together so well.