



OSPAR
COMMISSION

Results of the e-consultation on the
Quality Status Report 2010

OSPAR Convention

The Convention for the Protection of the Marine Environment of the North-East Atlantic (the "OSPAR Convention") was opened for signature at the Ministerial Meeting of the former Oslo and Paris Commissions in Paris on 22 September 1992. The Convention entered into force on 25 March 1998. It has been ratified by Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Norway, Portugal, Sweden, Switzerland and the United Kingdom and approved by the European Community and Spain.

Convention OSPAR

La Convention pour la protection du milieu marin de l'Atlantique du Nord-Est, dite Convention OSPAR, a été ouverte à la signature à la réunion ministérielle des anciennes Commissions d'Oslo et de Paris, à Paris le 22 septembre 1992. La Convention est entrée en vigueur le 25 mars 1998. La Convention a été ratifiée par l'Allemagne, la Belgique, le Danemark, la Finlande, la France, l'Irlande, l'Islande, le Luxembourg, la Norvège, les Pays-Bas, le Portugal, le Royaume-Uni de Grande Bretagne et d'Irlande du Nord, la Suède et la Suisse et approuvée par la Communauté européenne et l'Espagne.

Contents

Introduction	4
Comments and responses	5

Introduction

The Quality Status Report (QSR) 2010 is a science based holistic evaluation of the quality status of the marine environment of the North-East Atlantic. It also assesses the progress OSPAR has made towards the objectives of its strategies on biodiversity and ecosystems, eutrophication, hazardous substances, offshore industries and radioactive substances. Draft 2 of the QSR 2010 (status 31 October 2009) was publicised in the period 1–30 November 2009 on the OSPAR website in an e-consultation process.

The consultation sought views from stakeholders on the QSR 2010 summary report as a document for shaping the future development of programmes and measures for the protection of the marine environment of the North-East Atlantic. The main questions of the consultation were:

- Does the QSR 2010 give a balanced picture of the quality status of the North-East Atlantic?
- Is the information of the QSR 2010 relevant to the stakeholder in the form presented, and if not, why not?
- Does the QSR 2010 meet the stakeholder's expectations?
- Does the overall evaluation provide good directions for further action to protect the OSPAR marine environment?
- Are there any existing or emerging impacts on the marine environment and associated problems that are not, or are not sufficiently, recognised in the report?
- For particular aspects pertinent for the stakeholder, do the evidence in the QSR and its underlying thematic assessments support the conclusions that have been drawn?

OSPAR has invited all interested stakeholders, including:

- Scientists and researchers at universities or relevant private institutes;
- Industries and NGOs with no OSPAR observer status, for example national NGOs, fisheries organisations etc.;
- Local governments;
- The general public.

By the deadline of 30 November, seven individuals and institutions had sent their contributions. Two contributors requested that their contributions are not publicised and are therefore not included in the appended compilation of contributions received.

OSPAR welcomes the comments received as an important contribution to assure the quality of the QSR 2010 and its relevance for the management of the marine environment in the coming years.

The OSPAR Environmental Monitoring and Assessment Committee (ASMO) at its meeting on 25–29 January 2010 considered a response to each comment received. All comments have triggered a critical review of the text concerned. In a number of cases this has led to amendments of the text. A text box at the end of each contribution, for which publication has been accepted, summarises OSPAR's response.

Comments and responses

Yi-Ching Chung commented:

Key Findings

In overall, this is an excellent and very detailed report. In p.1 (from line 12), It would be good that adding a bullet related to medium or large scale atmospheric, circulation and climate change trends. Meanwhile, for the rising of sea level (line 22), how much is the increase in sea level per year or recently (Please provide the figure)?

Chapter 3 Climate change

In line 18 of p.6, by ice and what?

The evolution of snow cover, depth, depletion onset can be included along with the evolution of sea ice due to climate change (after line 19 of p.6).

Chapter 5 Hazardous substances

What is the acceptable concentration for every kind of hazardous substance? I'd like to know because people always ask me to provide a number.

Chapter 7 Offshore oil and gas industry

N/A

Chapter 9 Other human activities and impacts

Please list the percentage of impact (for example, oil spills) due to tourist boats and research boats respectively in Arctic (Region 1) if possible.

OSPAR's response

The current status of knowledge on climate change impacts involves considerable uncertainties and data limitations at regional scale. Precise values are presented in the Key Findings where confidence is high, the figures are relevant at regional level, and their presentation in the limited space is not misleading. Climate change has many more impacts on land and terrestrial ecosystems which are not treated by the QSR. Melting ice and snow may however release stored contaminants and increase their run-off to the sea in melt water and the text in Chapter 3 has been revised to reflect this.

Limitations in data also exist in relation to some human activities, including oil pollution from particular types of boats.

Criteria for assessing status of chemical pollution vary for each contaminant involved. The criteria used by OSPAR in the QSR assessment are given in agreement 2009-2 and will be accessible in the electronic version of the QSR.

John Mouat commented for KIMO:

Chapter 09 Other human activities and impacts

In section **H2 Shipping exerts a number of pressure** Paragraph 3 highlights the main pressure from Shipping there is only a very weak reference to garbage. Shipping is one of the main sources of marine litter in the marine environment and is highlighted as such in the section on marine litter. Therefore to be accurate and ensure consistency the following bullet should be added in line with the first bullet point "pollution by marine litter from incidental, operational and illegal discharges.

In Section **H2_Air pollution from ships is increasing** there is data about amounts of air pollution however there is no discussion of what the impacts of this pollution is and perhaps this needs to be addressed.

In section **H2_Illegal discharges and disposal of waste still occurring** paragraph 19 the final sentence makes leaves the reader unsure if shipping is actually a major source of litter and would be better replaced with "While shipping is acknowledged as a major source of marine litter it is difficult to quantify the exact amount as many litter items can be attributed to more than one source."

OSPAR's response

The discharge and disposal of waste, including the illegal disposal of wastes (litter), from ships is one pressure recognised in Chapter 9. Indeed, while shipping is acknowledged as a major source of marine litter, it is difficult to quantify the exact amount as many litter items can be attributed to more than one source. The situation is similar for air pollution. Despite a large amount of information on inputs via the atmosphere, there is limited understanding of the contribution of shipping to environmental impacts. The mentioned sections of Chapter 9 have been revised to reflect these responses.

Kateryna Wowk commented:

Socioeconomic Value

Throughout the report, the importance of marine ecosystems to communities in the region may be clear to ocean users and experts, but may not be clear to the public or decision makers. Chapter 9, Other human uses and impacts, provides much detail, but still I see a lack of a succinct, clear and hard-hitting message that provides some detail on the socioeconomic value of the region's oceans and coasts to coastal and other communities. Thus, I recommend including more detail on linkages between marine resources and their social and economic values, either in the Introduction or as a separate chapter. I also recommend that the report provide for future work in the areas of public education and outreach to enhance the understanding of communities in the region regarding the importance of their oceans and coasts.

Chapter 3 Climate change

Resilience and Climate Change Impacts

It is encouraging to see that QSR 2010 includes a chapter on climate change as linked to ocean impacts, including ocean acidification. Though the Convention and Annexes do not specifically include programs of work to address climate change impacts, these effects are already being felt throughout the region and merit serious consideration in any future areas of work, and I commend the Commission and Contracting Parties on their valuable work in this chapter. However, while mentioned in the report, I think the concept of resilience in marine ecosystems is not given adequate attention.

In its April 2009 recommendations to the US Secretaries of the Departments of Commerce and Interior, the Marine Protected Areas (MPAs) Federal Advisory Committee stated that "ecological resilience is the capacity of an ecosystem or natural population to resist or recover from major changes in structure and function following natural and human-caused disturbances, without undergoing a shift to a vastly different regime that is undesirable and very difficult to reverse from a human perspective" (available: http://mpa.gov/pdf/fac/facfac_recommend300409.pdf). Contracting Parties to the OSPAR Convention should better incorporate this concept into their regional and national strategies. Given the magnitude and rapidity with which changes are occurring, I think this is important and could be better addressed in the QSR 2010.

Thus, either in Chapter 3, Climate Change, or in Chapter 10, Protection and Conservation of Biodiversity and Ecosystems, I recommend emphasizing the importance of managing for resilience, particularly in light of climate change impacts in the ocean. This could include a brief section describing the concept and including principles on designing MPAs and / or networks of MPAs for ecosystem resilience.

As noted in the report, MPAs and networks of MPAs have an important role to play in responding to the increased uncertainty created by climate change, and helping to maintain and restore the resilience and capacity to provide ecological services of marine ecosystems. Degraded marine ecosystems have a compromised capacity to provide the ecological services we require, and have reduced resilience to ocean climate change. When MPAs are desired and are appropriate management measures, they can be used as one of an integrated suite of measures to achieve one or more of the following objectives (Lubchenco et al. (2008) *Managing for Resilience in Coastal and Ocean Ecosystems*):

1. Reducing non-climate stresses – Reduce anthropogenic stresses on marine ecosystems that exacerbate or interact negatively with ocean climate change to increase the resilience and health of marine ecosystems in order to improve their capacity to resist and recover from the impacts of ocean climate change.
2. Protecting the least susceptible – Site MPAs where ocean climate change effects are expected to be ameliorated by local conditions.
3. Protecting the least vulnerable – Site MPAs where marine ecosystems are expected to be naturally more resistant to climate change impacts.

4. Protecting the most valuable – Site MPAs where there are resources at risk from ocean climate change that are particularly valuable whether they are vulnerable or not. Valuable resources are those that are unique, rare, or ecologically, culturally, historically, socially or economically important, for example.
5. Protecting resilient populations – Design MPAs and MPA networks to protect sufficiently large effective population sizes to ensure replenishment, viability and genetic diversity to increase the chance of their persistence in the face of ocean climate change impacts over ecological (viability) and evolutionary (genetic) time scales.
6. Moving MPAs – Design and adapt MPAs and MPA networks to anticipate the fact that many species will undergo range or habitat shifts due to ocean climate change.
7. Maintaining connectivity – Site and design MPAs to create ecologically connected and functional networks with 'corridors' or 'stepping stones' that facilitate the range shifts of populations and the movements of individuals and genes in response to ocean climate change.
8. Spreading risk – Design MPA networks to spread the risk of catastrophic loss due to the more extreme impacts of climate change by protecting a range of habitats and replicated sites.
9. Creating refugia – In the face of climate change impacts that have the potential to drive large numbers of species and ecosystems to extinction, MPAs should be designed to buffer uncertainty and to create climate change refugia.

Integration of national and regional efforts with other climate change adaptation management approaches has great potential in mitigating some of the anticipated impacts of climate change on marine resources. With the proper management tools in place, nations will be able to design and adaptively manage MPAs and Networks of MPAs to promote resilience as climate change impacts materialize. The recommendations above are brought to your attention for prioritization and programmatic implementation in order to maximize management effectiveness.

OSPAR's response

Socio-economic analysis is an emerging field at regional and international level. Concepts for both assessment and information collection are in development and OSPAR has only recently started work in this direction. The socio-economic status of the OSPAR Regions will need to be addressed in future assessments. Chapter 2 has been revised to add available socio-economic information and to do so for the OSPAR Regions, in order to provide a slightly expanded context for the report.

Indeed the OSPAR network of marine protected areas (MPAs) will have an important role to play in helping to maintain and restore the capacity ecosystems to resist and recover from the impacts of ocean climate change. Yet, the discussion of how this could and should be achieved in practice and how this will link with future adaptation strategies has still to take place in the OSPAR framework and cannot be anticipated by the QSR 2010. The considerations of *Managing for Resilience in Coastal and Ocean Ecosystems* are providing a useful input into this discussion to be taken forward by the OSPAR Committee on Biological Diversity and Ecosystems.

*Martin Hum commented:***Chapter 1 Introduction**

- Fig 1.1 The subdivisions within countries are unnecessary and confusing - only the national boundaries need to be shown.
- Fig 1.2 It is not clear from the figure what the UNCLOS zone of jurisdiction covers. Also, doesn't the WFD also apply inland of the salinity limit?

Chapter 2 North-East Atlantic

- Fig 2.1 I assume the numbers over the circles refer to thousands of people employed - this is implied but not made explicit in the title.
- Page 6, line 20. What is a "cold seep"? As this is a term readers may not be familiar with, it needs a few words of explanation.

Chapter 6 Radioactive substances

- Fig 6.1 It would help to include national boundaries on the map, so readers can see in which countries installations are located.
- Fig 6.5 The title might be better set out as "Fig 6.5 A: Summary of statistical tests ... B: Time series of environmental concentrations ..."

Since significant changes in concentrations were only seen in Regions II and III, the map only needs to show these Regions and not the whole OSPAR area. Would it be possible to reduce the width of the table in "A" and put the map alongside it?

Chapter 12 Non-technical summary

- Page 1, line 14 On the basis of the conclusions in Chapter 6, it would seem fair to say here that "Discharges from nuclear installations have fallen and impacts on man and biota are low, although ...". This would give the reader an idea of the importance of this pressure relative to, say, that of hazardous substances.
- Page 2 The figure on this page doesn't appear to have a number or title. It is not clear to me what "status" indicates here. Is it a measure of the impact this pressure currently has on the quality status of the Region, or does it indicate the extent to which the relevant OSPAR strategy objective has been (or is likely to be) delivered? It would be helpful to clarify this in the title.

OSPAR's response

The text and illustrations have been reviewed in light of the comments. Almost all comments have been followed up and corrections have been made.

Dale Rodmell commented for the National Federation of Fishermen's Organisations



INTRODUCTION

OSPAR has published a Draft of its Quality Status Report 2010 which is now open for comment.

The NFFO is the representative body for fishermen in England, Wales and Northern Ireland. Our member vessels range from 40 metre stern trawlers operating at North Norway and Greenland to small, under 10metre vessels, beach launched and with limited range. The Federation holds seats on the EC Advisory Committee for Fisheries and Aquaculture, and the North Sea, North West Waters, Pelagic and Long Distance regional advisory councils. The NFFO is also a member of Europeche, the European trade federation for the fishing industry.

The NFFO is inevitably concerned by the findings reflected in OSPAR's Quality Status Report since it will affect the light in which its activities are viewed both by specialist institutions and also by the public at large.

COMMENTS

The NFFO has a number of comments which it wishes to make. They are of both a general and a specific nature.

General Comments

Consistent use of language

Whilst it is inevitable in a report of this size, there is an unevenness of tone among the various chapters which results in some inconsistencies between the views expressed at various points in the text.

Of concern to the NFFO is the view presented in the Summary that introduces Chapter 8 Use of Living Marine Resources which reads:

Excessive fishing pressure continues to have a considerable impact on marine ecosystems. The overall status of many fish stocks is improving but they remain a cause for concern. Habitat destruction and the depletion of key predator and prey species and consequent food web effects are of concern.....

Starting the sentence with the word "excessive" without any qualification provokes a very negative reaction which is not justified by much of evidence which is alluded to in the text – c.f. paragraph 26¹, 33, Figure 8.1.4 . This is a matter of concern to the fishing industry since such pronouncements are likely to be seized upon as pointing to the need to ban all fishing. The same comments also apply to the use of the word "destruction" whereas in the text references are consistently made to damage and disturbance – c.f. paragraph 6, 54.

The NFFO recognises that fisheries do, inevitably, have some impact on both habitats and species and thus has the potential to affect bio-diversity. It is committed to sustainable fisheries but at the same time it takes the approach that an ecosystem approach requires the recognition of man as a key part of the ecosystem

¹ Incidentally, the comment on cod stocks in the Greater North Sea and their continuing decline appears to be negated by more recent data.

(being usually its top predator). A consistent approach to the use of language in the report is therefore a matter of concern.

Problems of Aggregation

The problem of aggregation and scale is alluded to in the text on a number of occasions. It is a matter for concern. There is a tendency to generalise that minimises the progress that has been made in certain areas. As the text makes clear, in most areas there have been some improvements – perhaps not as many as is desirable, but there has been progress none the less.

From the point of view of the NFFO, it is important that this progress should be recognised and encouraged. It is important that fishermen feel that the efforts that they are taking, often at an individual or group level, are being recognised: there is little point in altering behaviour if the industry continues to be berated for its failings. All stick and no carrot is a very poor incentive.

It is also important to note the relevance of scale and aggregation in ecosystem assessments, Chapter 9, paragraph 9. There are so many unknowns, not just in terms of data but also in terms of interpretation and interlinkages, that the level of uncertainty attached to the findings for most areas would be regarded as unsatisfactory for most commercial decision-making.

Problems of Lack of Knowledge

Throughout there are references to a lack of knowledge and insufficient data. This caveat is expressed most forcefully in Chapter 11 Towards ecosystem assessment – e.g. paragraphs 1 and 2.

From the point of view of the fishing industry it is unsatisfactory to base policy on such incomplete knowledge (and there appears to be very little interest at a government level in improving it). There is a tendency to introduce policies without sufficient regard for their consequences (often without proper Impact Assessments) and then – when they do appear to be working immediately – to introduce yet further policies. Pressure to behave in this fashion is increased by unrealistic timescales.

Whilst it would be wonderful if sustainable fisheries and Good Environmental Status were to happen overnight, setting unrealistic timescales will not make them happen any quicker but may in fact retard the process.

Dynamic vs. Static

A constant problem when dealing with the marine environment is that it is a dynamic system in physical, temporal and spatial terms. The importance of climate change for the marine ecosystem is mentioned on a number of occasions, yet the impression remains that this is not really factored into the assessments and the ECOQOs that have been developed.

The stress on non-indigenous species is one instance of this tendency. Climate change is altering the prevalence of species in areas so that it is no longer realistic to envisage a return to the *status quo ante*.

So far ECOQOs have only been developed for the Greater North Sea and it is recognised that they may need to be adapted for other areas. It may, however, also be necessary to adjust the ECOQOs as species adapt to new conditions even within the Greater North Sea. OSPAR reviews occur every ten years but it may be necessary to build greater flexibility into backward-looking ECOQOs (particularly since our knowledge is so limited).

Specific Comments

Whiting in Region II

The UK fishing industry has repeatedly requested a proper assessment by ICES of whiting in the North Sea with particular reference to the North East English Coast. Since 2000 there has been a gaping disparity between ICES comments on the prevalence of whiting in the North Sea and the reality experienced by fishermen. The level of discarding that this has resulted in is scandalous.

Could OSPAR not use its influence to bring about a proper assessment of this stock and in particular the question as to whether or not there are two separate stocks in the North Sea?

Stakeholder consultation on the Cod Recovery Plan

The NFFO would like to correct the impression given in the report, Box 8.1.4, that there was “*comprehensive stakeholder engagement in recovery plans*”. In fact the 2008 Cod Recovery Plan was imposed by the Commission without any trace of an Impact Assessment and without regard for the opinions expressed by the industry. Whilst it is to be hoped that real stakeholder involvement will occur in the future, it would be misleading to portray the Cod Recovery Plan of 2008 as an example.

SUMMARY

Whilst the NFFO is committed to sustainable fisheries and shares many of OSPAR’s objectives² it is concerned as to how the Quality Status Report may be interpreted and used by other institutions. It therefore would like to stress the importance of:

- maintaining a balanced, temperate approach;
- keeping the balance between the general and the particular (the aggregation/scale question);
- encouraging governments to put more resources into improving knowledge and data; and
- making greater provision to encourage the incorporation of the dynamic nature of the marine environment into its assessments.

OSPAR’s response

Having considered the comments and concerns expressed, ASMO concluded that fishing pressure continues to have a considerable impact on marine ecosystems and many problems remain despite efforts to improve management. Exploitation of many stocks continues to be beyond the levels they can sustain, while the status of a large number of stocks cannot be fully assessed due to poor data. Habitat destruction and the depletion of key predator and prey species and consequent food web effects are of concern. The main messages of the chapter have been aligned to these conclusions. The text was also reviewed on the point of stakeholder engagement in cod recovery plans.

In developing a regional summary of environmental impacts from fishing for the fishing section of Chapter 8, ASMO highlighted the need for improved assessment of whiting and other stocks as a key issue.

² In so far as the precautionary approach is concerned the NFFO has reservations about the level of evidence that is required in order to prove that there is a possibility that fishing poses a threat to bio-diversity. Also, whilst it recognises the value of the precautionary approach when stocks are declining it is concerned that a blanket application in a recovery situation may lead to increased discards, thus retarding recovery.



OSPAR COMMISSION

New Court
48 Carey Street
London WC2A 2JQ
United Kingdom

t: +44 (0)20 7430 5200
f: +44 (0)20 7430 5225
e: secretariat@ospar.org
www.ospar.org

OSPAR's vision is of a healthy and diverse North-East Atlantic ecosystem

ISBN 978-1-907390-41-8
Publication Number: 500/2010

© OSPAR Commission, 2010. Permission may be granted by the publishers for the report to be wholly or partly reproduced in publications provided that the source of the extract is clearly indicated.

© Commission OSPAR, 2010. La reproduction de tout ou partie de ce rapport dans une publication peut être autorisée par l'Editeur, sous réserve que l'origine de l'extrait soit clairement mentionnée.