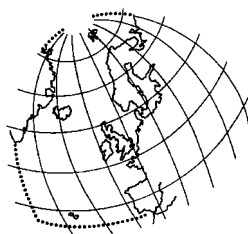


Progress Report on the work of the OSPAR Pilot Project on Monitoring Marine Beach Litter during 2005



OSPAR Commission
2006

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.

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.

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Executive Summary/Récapitulatif

Marine litter has widespread ecological effects, a serious negative impact on the aesthetic qualities of many important coastal stretches, and a significant detrimental economic effect on local coastal communities worldwide, including in the North-East Atlantic region. The assessment made within the framework of the OSPAR Commission, and reported in the OSPAR Quality Status Report (QSR) 2000, indicates that there had been no improvement in the situation with regard to marine litter since the previous quality status report for the region.

Les déchets marins ont des effets écologiques très répandus et un impact négatif considérable sur la qualité esthétique de nombreuses zones côtières importantes. Ils ont également un effet préjudiciable sur l'économie des communautés côtières locales dans le monde entier, notamment dans la région de l'Atlantique du nord-est. L'évaluation qui a été réalisée dans le cadre de la Commission OSPAR et qui figure dans le Bilan de santé d'OSPAR, le QSR 2000, ne révèle aucune amélioration de la situation par rapport au QSR précédent pour la région, en ce qui concerne les déchets marins.

The OSPAR Pilot Project on Monitoring Marine Beach Litter was agreed by OSPAR at the 2001 meeting of the Biodiversity Committee, BDC 2003 agreed on the prolongation of the project for a second period of 3 more years. Sweden and KIMO International report progress to OSPAR's Biodiversity Committee annually. This document reports on the implementation of the OSPAR Pilot Project on Monitoring Marine Beach Litter in 2005, the second year of the second phase of the Project, and includes information on the continued identification and testing of marine litter types to be used as indicators of marine litter. The document also includes the structure of the final report on the project to be presented in 2007, and the work plan and timetable for 2006 which is the final year of this work.

Lors de la réunion de son Comité biodiversité (BDC) en 2002, OSPAR est convenue du projet pilote sur la surveillance des déchets marins rejetés sur les plages, lequel a été réalisé en 2005. Le BDC 2003 est convenu de prolonger le projet d'une deuxième période de 3 ans. La Suède et KIMO International présentent, tous les ans, un rapport d'avancement à la réunion du BDC. Le présent rapport porte sur la mise en œuvre du projet pilote OSPAR sur la surveillance des déchets marins rejetés sur les plages en 2005, deuxième année de la deuxième phase du projet. Il comporte des informations sur la détermination continue des types de déchets marins qui doivent être utilisés comme indicateurs ainsi que sur les tests permanents qui sont effectués dans ce sens. Il comporte également la structure du rapport définitif qui sera présenté en 2007, ainsi que le programme de travail et le calendrier pour 2006, c'est-à-dire la dernière année des travaux.

The Pilot Project Steering Group met once during 2005 and efforts within the Pilot Project during 2005 have focused on:

- a. continuation of the field surveys of the reference beaches in Belgium, Denmark, Germany, the Netherlands, Portugal, Spain, Sweden and the United Kingdom;
- b. further efforts to include in the project, as complementary and comparative data, experience and results from beach surveys conducted by NGOs along the coast of France;
- c. discussions and decisions on relevant approaches in the statistical processing and analysis of the data from the field surveys, as well as an initial discussion on how to present and report the data and results in order to provide clear answers to relevant questions on trends, sources etc.;
- d. identification and testing of possible marine litter items to be used as indicators for various source categories of marine litter in the OSPAR area (operational waste from shipping and fishing/aquaculture, non-operational galley waste from shipping and fishing, as well as sanitary/sewage-related waste and waste from recreational activities/tourism), as well as indicators for general trends in quantities of marine litter;
- e. discussions on a possible amendment to the OSPAR Biodiversity and Ecosystems Strategy to include an Operational Objective for marine litter, instead of an Environmental Quality Objective.

Le groupe directeur du projet pilote s'est réuni une fois en 2005. Les efforts du projet pilote se sont concentrés en 2005 sur:

- a. *la poursuite des études sur le terrain des plages de référence en Belgique, au Danemark, en Allemagne, aux Pays-Bas, au Portugal, en Espagne, en Suède et au Royaume-Uni;*

- b. *des efforts supplémentaires afin d'inclure dans le projet, l'expérience acquise et les résultats obtenus à partir des études des plages qui ont été effectuées par des ONG le long des côtes françaises. Ces données seront considérées comme complémentaires et comparatives;*
- c. *des discussions et des décisions sur les approches pertinentes relatives au traitement statistique et à l'analyse des données provenant des études sur le terrain ainsi qu'une discussion préliminaire sur la manière de présenter et de notifier les données et les résultats afin de répondre clairement aux questions pertinentes sur les tendances, les sources, etc.;*
- d. *la détermination et les essais effectués sur les déchets marins qui sont utilisés comme indicateurs pour diverses catégories de sources de déchets marins dans la zone OSPAR (déchets opérationnels provenant de la navigation et de la pêche/aquaculture, déchets non opérationnels provenant de la navigation et de la pêche ainsi que déchets liés aux rejets sanitaires/d'eaux usées domestiques et aux loisirs et au tourisme), ainsi que les indicateurs des tendances générales des quantités de déchets marins;*
- e. *des discussions sur des amendements éventuels de la Stratégie OSPAR diversité biologique et écosystèmes afin d'y faire figurer un Objectif opérationnel pour les déchets marins à la place d'un Objectif de qualité environnementale.*

The report highlights the lack of financial support for the participants in this project. There is not yet a mechanism for carrying forward monitoring of marine litter after the end of the current pilot project in 2007. In addition, Sweden has no longer the possibility of continuing to take the lead for this work. OSPAR 2006 acknowledged the longstanding involvement by Sweden on leading the work on combating marine litter. At OSPAR 2006 it was suggested to explore linkages with the work on litter being developed under UNEP.

Le rapport met en évidence le manque de soutien financier de la part des participants au projet. Il n'existe pas encore de mécanisme permettant de poursuivre la surveillance des déchets marins lorsque le projet pilote actuel se termine en 2007. De plus, la Suède n'est plus en mesure d'assurer le pilotage de ces travaux. OSPAR 2006 reconnaît la participation de longue date de la Suède dans le pilotage des travaux de lutte contre les déchets marins. Lors de la réunion d'OSPAR 2006 on suggère d'étudier des liens possibles avec les travaux sur les déchets marins entrepris dans le cadre du PNUE.

1. Continuation of the field surveys of the reference beaches in Belgium, Denmark, Germany, the Netherlands, Portugal, Spain, Sweden and the United Kingdom

The surveys of the project reference beaches have continued according to the work plan. There are altogether 41 reference beaches. The project database currently (February 2006) contains data from about 645 surveys, with a total of approximately 55,000 individual observations.

Continued project participation during the last year of the project remains uncertain, however, for some participants, as funding has not been secured for all of 2006. For Germany, funding will cease on 31 May 2006, after which the beach surveys cannot continue. For some other participants, funding is uncertain or insufficient.

2. Further efforts to include in the project experience and results from beach surveys conducted by NGOs along the coast of France, as well as some other complementary and comparative data

The contacts between the Pilot Project and environmental institutions and NGOs in France, active in marine litter work along the French coast, have intensified during 2005. As a result, cooperation has now been established, and agreements have been made on exchange of data and information. One representative of the French network of organisations has joined the Pilot Project Steering Group and acted as contact point between the Pilot Project and the French organisations. The French beach data will be used as complementary data, as it has not been compiled in accordance with the methodology used in beach surveys within the Pilot Project. However, considering that comprehensive French data is available since 2000, and can be used without compromising the scientific principles of the statistical processing and analysis of the Pilot Project, the addition of this complementary and comparative data will be most valuable in the analysis of trends, sources and general conditions regarding marine litter in the OSPAR Maritime Area. The 9th meeting of the Steering Group was held in France, on 1-2 October 2005, to provide an opportunity to exchange experience and discuss future cooperation. Representatives from ADEELI-CPIE Flandre-Maritime, E.S.T.R.A.N., Aquacaux, and Institut des Milieux Aquatiques (IMA) presented their work and that of other French organisations and structures in the field of marine litter (collection, organised sorting and identification, and regular documentation and registering of marine litter on French beaches).

In late October, France informed Sweden and the OSPAR Secretariat that France wishes to participate in the Pilot Project on an official basis. The French representative, from Centre de Documentation, de Recherche et d'Expérimentations sur les Pollutions Accidentelles des Eaux (Cedre), has joined the Steering Group.

As previous attempts to include more countries in the Pilot Project have failed, data on occurrence of marine litter is, unfortunately, missing from several coastal areas along the North-East Atlantic. Individual observations and short-term documentation of marine litter in other areas cannot and will not be used as material for scientifically solid statistical analysis in this project. However, the Steering Group has decided to make an effort during 2006 to compile individual observations and possible conclusions regarding marine litter also on beaches in Norway, the Shetland Islands, Ireland, the Outer Hebrides and the Bay of Biscay. If additional data from these areas could be found, it could prove useful in the general presentation of patterns and possible trends in the occurrence of marine litter in the OSPAR Maritime Area.

3. Discussions and decisions on relevant approaches in the statistical processing and analysis of the data from the field surveys, as well as an initial discussion on how to present and report the data and results to provide clear answers to relevant questions

3.1 Preliminary analyses

Some preliminary test analyses, based on the contents of the project database by August/September 2005, were made and presented to the Steering Group in November 2005 for consideration and discussion. Judging by these test analyses, the project data, if completed during 2006, will allow for a comprehensive analysis of regional and local differences in the composition of marine litter and in the detection of regional and local trends.

3.2 Spatial scale

According to its Terms of Reference, the OSPAR Pilot Project on Monitoring Marine Beach Litter is to make an overall assessment of the trends in marine litter in the OSPAR Maritime Area. Thus, the statistical analyses of the data are primarily to be made on an overall OSPAR Maritime Area scale, based on data from all reference beaches.

However, the fact that regional differences have been detected in the composition of marine litter (indicating different sources) is one reason for also making more detailed regional analyses. The results of the regional analyses will be compared to the overall results for the OSPAR Maritime Area as a whole. Regional differences could be reflecting both the geographical location of the region (external factors like currents, winds and shipping density/fishing intensity) and the impact of local/regional sources and activities. In the case of future monitoring of marine litter, it might need to be tailored to features and phenomena typical of a certain region. In addition, regional information could prove valuable when assessing the regional impact from various sources of marine litter. The response in terms of measures might differ between regions. Consequently, a number of regional analyses of the beach survey data are also to be made as a complement to the overall analyses for the OSPAR area as a whole.

There are various ways of dividing the North-East Atlantic/OSPAR Maritime Area into functional regions for the purpose of this project.

Based on several considerations, the Steering Group has decided that the following delimitations of regions should initially be used:

- 1 Northern North Sea;
- 2 Celtic Seas;
- 3 Southern North Sea;
- 4 Bay of Biscay;
- 5 Iberian coast.

Depending on the input of data from French beaches along the English Channel, region 3 could at a later stage be divided into two regions (3a and 3b). In that case, the division of regions as a basis for data analysis will be as follows:

- 1 Northern North Sea;
- 2 Celtic Seas;
- 3 a. Southern North Sea;
- 3 b. English Channel;
- 4 Bay of Biscay;
- 5 Iberian coast.



3.3 Temporal scale

Judging by the test analyses made, there are good indications that the project data will allow for conclusions on seasonal differences in marine litter pollution. Based on several considerations, the Steering Group has decided that data analyses are to be made primarily based on yearly averages; that data is to be standardised for effects of beach cleaning frequency (time of accumulation); and that trends over seasons will be briefly explored and, if of interest, further analyses will be made.

3.4 Beach documentation

During 2005, in addition to the general descriptions already available, all beaches have been documented in more detail in terms of beach characteristics, degree of impact from different activities, cleaning patterns, etc., as background information for data analyses. A standard beach questionnaire has been used and filled out by the people who do the beach surveys. This documentation will be further complemented, e.g., with detailed information on factors that have an impact on the type and amount of marine litter potentially polluting a given stretch of coastline, including information on special events that could explain seemingly abnormal observations.

3.5 Discussion on external, natural factors

The impact of external natural factors, such as prevailing currents, circulation patterns in general, and prevailing weather systems (long-term weather data) in an area, will also be considered during the analysis of the data. Information on such factors is being collected in parallel to the marine litter data.

3.6 Report structure

A first draft structure of the project report has been discussed and, in principle, approved by the Steering Group. This structure will, however, be open for further suggestions and changes.

Background

Project objectives (Terms of reference, etc.)

Project set-up (Participation (countries, NGOs), co-ordination, scientists/volunteers. Financing)

Methodology (Survey protocol. Criteria for the selection of reference beaches. Survey periods. Indicators. Statistical aspects (data management, statistical methods used, etc.).

Distribution of beaches (Location of beaches. Descriptions of beach characteristics.

Results and experiences: Methodology. Quality assurance (Marine Litter Guide). Marine litter indicators. Composition of marine litter. Overall composition and characteristics. Regional differences (regional characteristics). New litter items.

Marine litter trends: How trends have been assessed. General/overall trends for the project area/OSPAR maritime area. Regional trends. Trends for different source categories.

Operational objective for marine litter in the OSPAR Maritime Area

Additional outputs from the project

Conclusions and recommendations

References

Participants

4. Identification and testing of possible items to be used as source-specific marine litter indicators in the OSPAR area, as well as indicators for general marine litter trends

The Pilot Project focuses on a selection of source-specific indicators of marine litter in order to supply general trends and trends on marine litter pollution caused by various sources. As decided by the BDC 2005, the Pilot Project will also focus on a continued discussion and agreements on general marine litter indicators and source-specific indicators for tourism/recreational activities.

A preliminary testing of the agreed indicators was made in September 2005, based on the contents of the project database at that time. If indicators appear to occur generally and frequently, they might be candidates for selection as general trend indicators.

The preliminary testing of indicators produced interesting results that will be a good basis for further work. A high frequency of occurrence, and a wide distribution (large number of reference beaches where the item is found) of a given marine litter item, are important factors for its suitability as an indicator.

The Steering Group decided on a number of agreed properties that an item should have in order to qualify as a relevant marine litter indicator. Such an item should be typical for its source, common in occurrence (have a high statistical power), easy to identify, easy to count, have mechanical characteristics that are common to other items in its category, and have a true temporal trend that should match that of other items in its category.

The already selected and agreed indicators for shipping, fishing and aquaculture, galley waste, sewage, and tourism/recreational activities will be used in the comprehensive analysis of all project data, upon which the conclusions and recommendations of the Pilot Project will be based. Changes in this selection of items will be made only if unforeseeable problems emerge during the analysis.

However, further analyses of the selected indicator items need to be made before decisions can be made on possible general marine litter indicators.

5. Possible amendment to the OSPAR Biodiversity and Ecosystems Strategy to include an Operational Objective for marine litter, instead of an Environmental Quality Objective (follow-up of the decision by BDC 2005)

As suggested by the BDC 2005, an alternative to the Environmental Quality Objective proposed by the Steering Group, an amendment could be made to the OSPAR Biodiversity and Ecosystems Strategy, with an operational objective for marine litter. The BDC requested Sweden to present a proposal for an operational objective for marine litter.

However, Sweden has requested the Steering Group of the OSPAR Pilot Project to consider instead whether an operational objective for marine litter could be defined in the final project report. The Steering Group has accepted to include the matter of defining an operational objective for marine litter in the elaboration of the final project report (to be submitted to the OSPAR BDC 2007).

6. Submission to the OSPAR Commission of a revised proposal on the designation of a new Special Area, for the purpose of MARPOL Annex V (follow-up of the decision by BDC 2005)

Sweden submitted a revised proposal on the designation of a new Special Area, for the purpose of MARPOL Annex V, covering sections of the western parts of the OSPAR Maritime Area, to the OSPAR Commission for consideration in June 2005. The OSPAR Commission could not agree to submit the proposal to IMO/MEPC, but it was agreed that Sweden would work for the further refinement of the proposal, in cooperation with other OSPAR Contracting Parties and in coordination with the EU. The Steering Group has been informed about this decision and about the proposed work process under the leadership of Sweden. However, the Steering Group will not be further involved in this process. Sweden informed OSPAR 2006 that they had decided not to continue with the procedure for applying for the designation of the North Sea as a Special Area under MARPOL. Sweden also informed the meeting that after having been lead country on marine litter since 1993, they no longer had the possibility of continuing and invited another Contracting Party to take the lead for this work.

7. Project Work plan and Timetable for 2006

The OSPAR Pilot Project has entered its final year (2006). The work will focus on comprehensive analyses of the beach survey data and the elaboration of the final project report, including conclusions and recommendations.

A tentative work plan and timetable for 2006 has been adopted by the Steering Group.

December 2005 -- January 2006	December/January beach surveys and submission of data to database.
February 2006	Submission of project progress report to BDC 2006.
March – April 2006	March/April beach surveys and submission of data to database.
March – May 2006	Beach survey data processing and analysis. Compilation of additional data. Report writing (first draft). Circulation (late May) to the SG of a first version of the final project report.
June–July 2006	June/July beach surveys and submission of data to database.
30 June – 3 July 2006	SG10 meeting (Sweden).
August – October 2006	Further data processing and analysis, based on discussions and decisions at SG10 meeting. New version of the final report.
September – October 2006	September/October beach surveys and submission of data to the database.
October 2006	<ul style="list-style-type: none"> • Circulation to SG of amended, second version of the final report. • Circulation to SG of project presentation products (in accordance with decisions at SG10).
November 2006	SG11 meeting
December 2006	December beach surveys and final submission of data to database.
December 2006	<ul style="list-style-type: none"> • Circulation to SG of third, amended version of the final project report, based on discussions and decisions at SG11 meeting. • Circulation of final versions of presentation products (decisions at SG11).
December 2006 – January 2007	<ul style="list-style-type: none"> • Submission to the SG of the final version of the final project report. • Submission to the SG of the final versions of all presentation products.
January 2007	Submission to the BDC 2007 of the final project report.