

BALANCING IMPACTS OF HUMAN ACTIVITIES IN THE BELGIAN PART OF THE NORTH SEA

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1. Presentation of the Maritime Institute

The Maritime Institute is a research facility within the Department of Public International Law of the Ghent University, Belgium. Prof. Dr. F. Maes is responsible for the coordination of the research. Prof. Dr. E. Somers is responsible for the national and international academic cooperation, and is director of the research facility. The Maritime Institute is an independent research unit advising and carrying out studies for governmental administrations, non-governmental organizations and private companies. The staff of the institute is specialized in topics concerning international maritime law, law of the sea, national and international environmental law, transport law, national and international environmental conservation law and related policy studies. The Maritime Institute organizes the post-graduate Interuniversity master course in Port and Maritime Sciences, and is involved in various (international) training projects in co-operation with other organizations or universities. For further information: see: www.maritieminstituut.be

2. Presentation of the research activities

2.1 The MARE-DASM-project

Within the (relatively small) Belgian part of the North Sea, there are a lot of actors who has a different interest in one or another use of the North Sea. In order to achieve a sustainable use of the North Sea, it is necessary to avoid the harmful use of it and to become a balance between the social, economic and environmental aspects. The research done in the framework of MARE-DASM '*Marine resources damage assessment and sustainable management of the North Sea*' has two main objectives. The first objective is to make an estimation of the socio-economic costs of the degradation of the marine environment. The costs of degradation will be compared with the economic and social profits of the use of the Belgian part of the North Sea by the current generation, in order to come to propositions of measures to be taken by the government to guarantee a sustainable use of the sea for the future generations. The second objective of the project is to make an estimation of the risk of accidental discharge in the marine environment of oil and other chemical products. The mathematical determination of the damage must enable the development of technical and legal procedures that allow to evaluate the degradation of the marine environment and to recover it financially on the polluter.

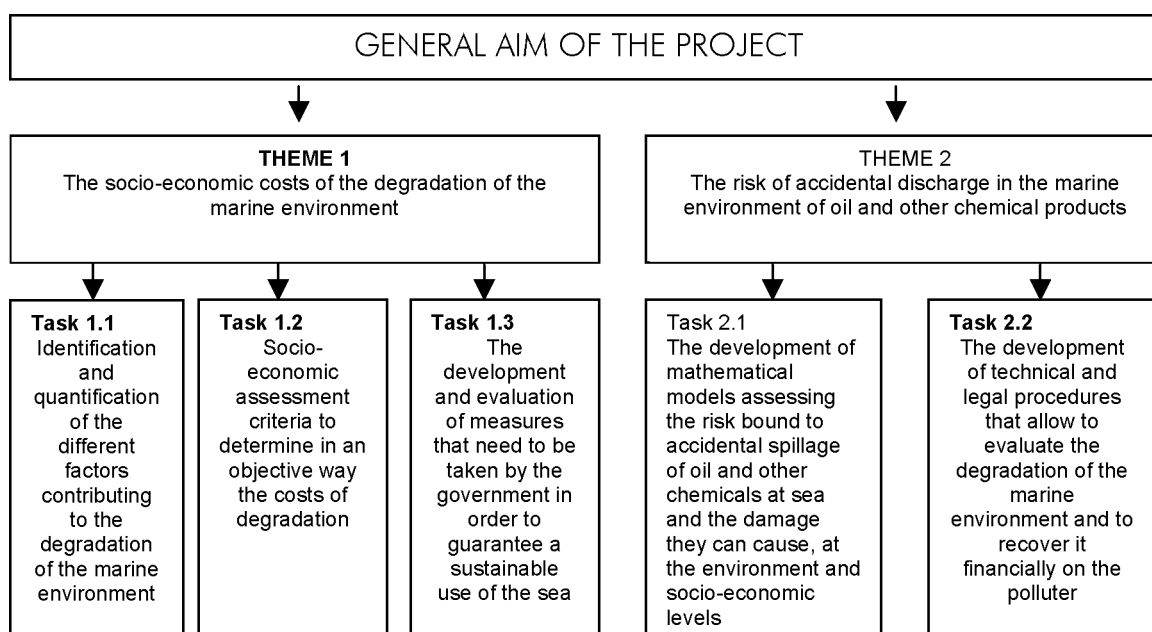
The MARE-DASM-project is a four-year research project (1998-2002), in the form of a multidisciplinary cooperation between ecotoxicologists, economists, lawyers, sociologists, political scientists and developers of mathematical models. The partners of the project are:

Maritime Institute, Ghent University, Prof. Dr. F. Maes (*coordinator of the project*);
Researchers: Drs Fanny Douvere, Drs Gwendoline Gonsaeles, Dr Jan Schrijvers

Laboratory of Environmental Toxicology and Aquatic Ecology, Ghent University, Prof. Dr. C. Janssen;
 Researchers: Ir. Dagobert Heijerick
 Centre for Environmental Law, Ghent University, Prof. Dr. H. Bocken;
 Researchers: Laurent Proot, Drs Sophie Deloddere
 Management Unit of the Mathematic Models of the North Sea, Dr. G. Pichot;
 Researchers: ir. Serge Scory
 Environmental Consultancy and Assistance (ECOLAS), Dr. P. Vanhaecke (*subcontractor*).
 Researchers: Karl Van Biervliet, Geert Bogaert, Mieke Deconinck, Sarah Bogaert, Ir. Dirk Le Roy

This project is financed through the scientific support plan for a sustainable Management of the North Sea of the OSTC (The Federal Office for Scientific, Technical and Cultural Affairs).

MARE-DASM: Marine resources damage assessment and sustainable management of the North Sea



The presentation will contain the results of Task 1.3 where the socio-economical benefits will be compared with the costs of degradation of the marine environment.

2.2 The BALANS-project

In the 5th North Sea Declaration (Bergen 2002) Ministers stressed the need to establish an ecosystem based management of the North Sea in order to conserve biological diversity and ensure sustainable development. To reach the latter, integration of science based environmental and socio-economic factors influencing the functioning of the North Sea ecosystem are essential. With the experience from the previous research project (MARE-DASM) it became obvious that a sustainable management of the North Sea is a very complex theme, in particular due to the interactions between the social, the economic and the ecological dimension. The purpose of this project is to gain experience in correlating and balancing relevant social, economic and ecological data, through the elaboration of

indicators, the weighing out of these indicators and the development of a conceptual policy model for a 'Sustainable Management of the North Sea'. As this type of research is very complex and is still in an embryonic phase for the marine environment, the project boundaries are limited to fisheries, sand and gravel extraction and the related shipping activities.

The research project '*Balancing impact of the human activities in the Belgian part of the North Sea*' (BALANS) has a duration of four years (2002-2006) and is coordinated by Prof. Dr. Frank Maes (Maritime Institute). The partners of the project are:

Maritime Institute, Ghent University, Prof. Dr. F. Maes;
 Researchers: Drs. Fanny Douvere, Dr. Jan Schrijvers
 The Sea Fisheries Department, CLO Ghent, ir. Drs. H. Polet;
 Researchers: Hans Hillewaert, Dr. Frank Redant, Bart Maertens
 Laboratory of Environmental Toxicology and Aquatic Ecology, Ghent University, Prof. Dr. C. Janssen;
 Researchers: n.b.
 Laboratory of Marine Biology, Ghent University, Prof. Dr. M. Vincx;
 Researchers: Dr. Steven Degraer
 Management Unit of the Mathematical Models of the North Sea (MUMM), ir. S. Scory;
 Researchers: n.b.
 Environmental Consultancy and Assistance (ECOLAS), Ir. D. Le Roy (*subcontractor*).
 Researchers: Dr. Bart Dewachter

This project is financed through the scientific support plan for a sustainable Management of the North Sea (PODO II) of the OSTC (The Federal Office for Scientific, Technical and Cultural Affairs).

BALANS: Balancing impact of the human activities in the Belgian part of the North Sea

