GAUFRE

TOWARDS A SPATIAL STRUCTURE PLAN FOR SUSTAINABLE MANAGEMENT OF THE SEA

Duration of the project: 01/01/2003 - 31/12/2004

Budget: € 516.075

Keywords: Sustainability, Interdisciplinarity, Structure

Plan, North Sea, Impacts

CONTEXT

The second Scientific Support Plan for a Sustainable Development Policy (SPSD II) aims to promote multidisciplinary research in order to balance economic, social and ecological aspects, being the pillars of sustainable development. The development of a spatial structure plan for the Belgian part of the North Sea fits within this framework. There is an increased demand for sea based activities. This is coupled with discussions and public controversies regarding the use of the marine space (windmills, nature reserves at sea,...). Moreover, international policy priorities indicate the importance of a spatial planning process for the different North Sea states. GAUFRE therefore tries to make a first attempt towards such a structure plan. It takes into account conflicts between interest groups and active participation of these groups and the broader public.

PROJECT DESCRIPTION

Objectives

The main aim of the project is the delivery and the synthesis of the scientific knowledge on the use and possible impacts of use functions. Consequently, a first proposal of possible optimal allocations of all relevant use functions in the Belgian part of the North Sea (BPNS) will be formulated. This will happen within the framework of sustainable thinking.

Methodology

GAUFRE wants to go beyond the mere result of producing a plan for an optimal allocation of use functions. It is obvious that the current call of the project within the limited span of time cannot contribute to a fully mature spatial structure plan. The project is therefore also putting emphasis on the methodological process towards a plan rather than the final product alone. This methodological process stresses interdisciplinarity, multifunctionality and public participation:

1 Interdisciplinarity:

To obtain objective information underlying the knowledge module, the impact maps and the spatial structure plan, a continuous flow among natural scientists, social scientists, decision makers, stakeholders and the general public is needed. Integration of sometimes opposite and even conflicting - interests should go beyond the specific sectors. The fine tuning of both environmental as well as socio-economic goals is therefore difficult but mandatory. The GAUFRE project contributes towards interdisciplinarity both by its partnership and user committee, as well by its use of existing databases and information gathered from previous projects.

2 Multifunctionality:

Because of its multifunctionality, layered and modular structure, it was decided to use a Geographical Information System (GIS) as the underlying methodological platform. This platform is not only an adequate tool for generating maps, but it is also able to allow spatial analysis of the data and integrate multicriteria decision support systems. This could be a way to allow the evaluation and balancing of spatial use and use intensity by different use functions for the BPNS. It has already been used in land based and sector restricted planning studies.

3 Public participation:

The need for a continuous flow of information among natural and social scientists, economists, decision makers, stakeholders and specifically the public, and the accessibility of the outcome towards its users, asks for a thorough public participation. The use of two workshops and the continuous interaction with an extensive user committee tries to bridge this gap during the process. Extensive public interaction and participation however can only start after a preliminary proposal for a spatial structure plan has come to shape.

Interaction between the different partners

The production of an accessible and scientific knowledge module will be co-ordinated by the Renard Centre of Marine Geology since they manage the GIS methodology. The input of data however will be shared by the Renard Centre of Marine Geology itself (geological data), the section Marine Biology (ecological data) and the Maritime Institute for legislative data and data regarding the user functions.

In a next step, Ecolas will co-ordinate the making of the different maps that will indicate the effects of the user functions.

The final step is meant to produce a first proposal for a structure plan. The effect maps will be compared and confronted with the user functions on the basis of a variety of criteria. For this step, the different partners will be asked to work together. The co-ordination will be done by the Maritime Institute.

Expected results and/or products

Each of the indicated objectives will produce an output. The following three steps with their end results can therefore be expected:

- 1 the making of an accessible and scientific knowledge module
- 2 the making of maps on which effects of user functions are shown
- 3 a first proposal towards an optimal spatial alloca-

These different steps will without doubt coincide with a continuous discussion, a conceptual analysis, the organisation of a workshop and the publication of scientifically reviewed papers.

PARTNERS

Activities

Maritime Institute (Ghent University)

This team contributes to the collection of legislative and socio-economic aspects of the different user functions. It will also co-ordinate the interdisciplinary approach towards a first proposal for a spatial plan.

Ecolas nv

This team will use the gathered data within the knowledge module in order to create effect maps concerning the different user functions. It will organise a workshop and play an important role in the search for a first proposal towards a spatial plan.

Section Marine Biology (Ghent University)

This team contributes to the collection of ecological aspects and it also joins the interdisciplinary approach in weighing and evaluating the user functions.

Renard Centre of Marine Geology (Ghent **University**)

This team contributes to the collection of geological aspects and it co-ordinates the collection of all data within a GIS environment. It additionally joins the interdisciplinary approach in weighing and evaluating the user functions.

CONTACT INFORMATION

Website of the network: www.law.ugent.be/intpub/maritiem_instituut/ gaufre.html

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Users Committee

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