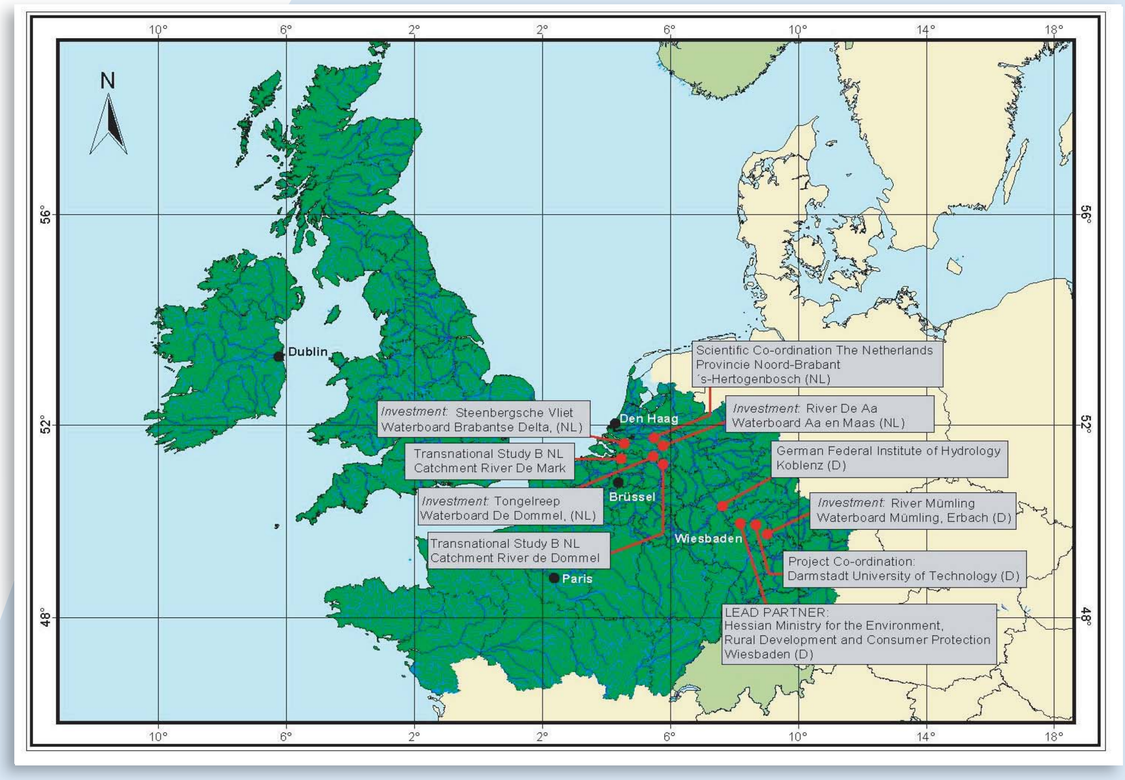
Nature-oriented flood damage prevention

nofdp is an INTERREG IIIB project funded by the European Regional Development Fund (ERDF) and started in 2004. On the field of flood damage prevention nofdp will provide multi-sectoral and multi-spatial planning instruments to the North-West-European (NWE) territory in a transnational dimension. In contrast to the past decades when prevention of flood damage mostly referred to technical measures, the recent severe floods have led to a much more comprehensive attitude. The hydrological cycle including ecological interactions as well as all-compassing human demands have set the framework for managing riverine systems. The ambitious challenge is to harmonise and to weigh the various conflicts of interests. In fact damage is caused by a loss of diverse human assets. Floods must be accepted as part of the hydrological cycle. nofdp addresses this topic by supporting decision-makers in riverine and spatial planning.



Geographical scope of nofdp

Which purposes should the IDSS serve?

Providing information
- compilation of relevant EU and national legislation as well as directives
- compilation of relevant spatial planning methodologies and instruments
- best practice examples on nature-oriented flood damage prevention

Modelling
- forecasting the impacts of planning scenarios on components of the riverine system
- modelling on local and river basin scale

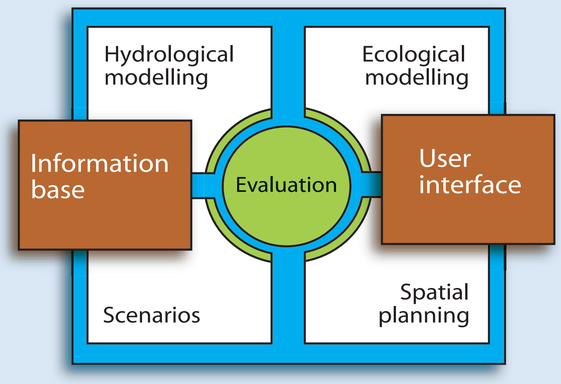
Support decision making
- multi-sectoral and multi-objective evaluation scheme for model based predictions
- providing transparency following the decision tree for the recommended decision
- harmonising interests of stakeholders and authorities participating in the decision process
- improving public participation and acceptance

For whom will the IDSS be designed?
- policy makers, politicians and officials
- plan approval authorities
- project managers
- stakeholders involved

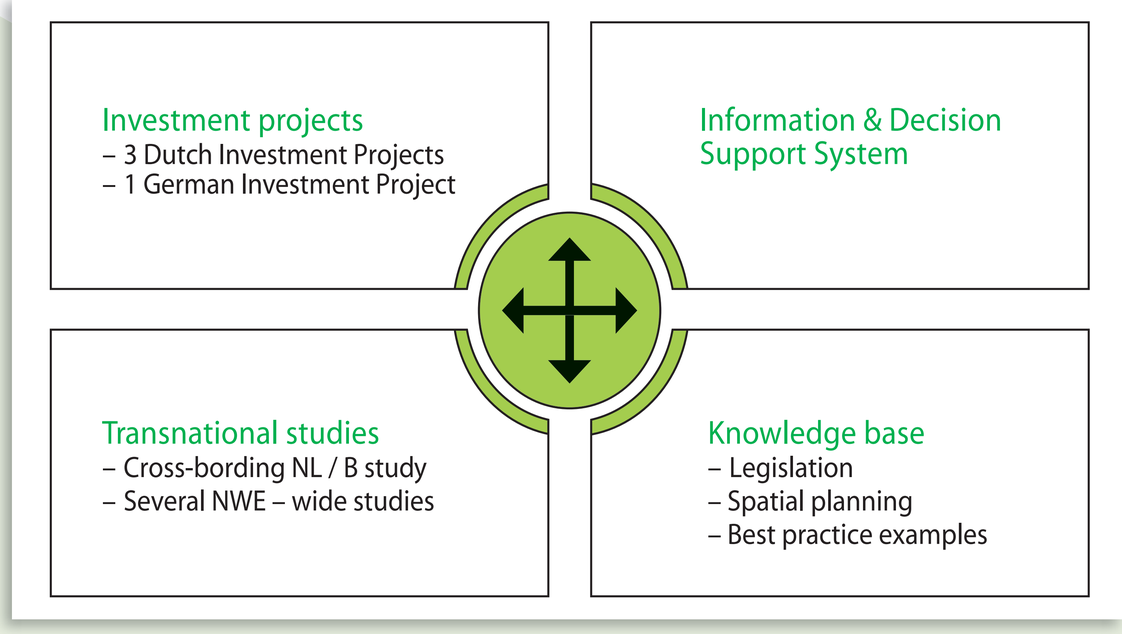
Water, ecological and human issues determine the complex functionality of river basins. Hence administrative measures interfere with all three compartments. While flood damage prevention measures have been considered to be the major driving force within this network, the impacts on ecology as another key component have formerly been neglected in riverine management. However to achieve integrated planning objectives the interrelations between ecology, spatial planning and water management must be key issues related to flood damage prevention. European and national policies as well as legislation indicate increasing awareness towards this conclusion. Thus nofdp will provide a balanced view on the issue of nature-oriented flood damage prevention.

This ambitious target is supported by four investment projects covering small to medium-size rivers all providing different examples in design and implementation strategy. Three investments are located in The Netherlands and one in Germany. Two studies for transboundary catchments covering Belgium and The Netherlands are carried out.

Deliverables will be a knowledge base and a modelling toolbox both assembled in an Information and Decision Support System (IDSS). Written guidelines will provide additional support for decision makers and project managers for making sound decisions for planning and implementation of riverine flood damage prevention measures.



System diagram of the Information and Decision Support System (IDSS)



Project structure of nofdp

nofdp **project partnership**

Lead Partner

Hessian Ministry of Environment,
Rural Development and Consumer Protection

Project Co-ordination
Darmstadt University of Technology

Partners

Provincie Noord-Brabant
German Federal Institute of Hydrology
Waterboard Brabantse Delta
Waterboard Aa en Maas
Waterboard de Dommel
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