

Evaluation of existing measures

Guidance Report



FLOODsite Task 12 has produced:

- Guidelines to evaluate effectiveness, efficiency, robustness and flexibility of measures and instruments that have been carried out as part of flood risk management in the past.

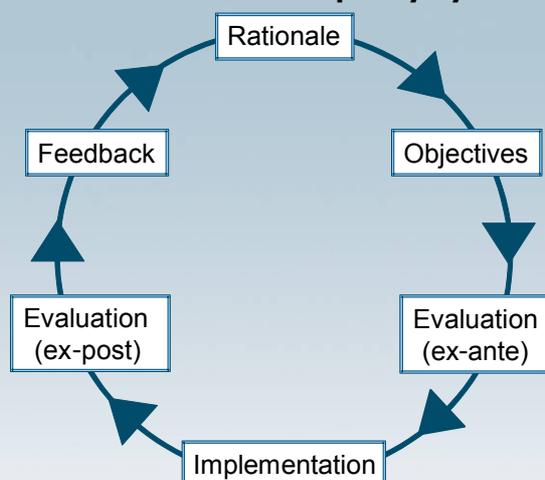
The guidance document is intended for:

- Practitioners who wish to understand more about the intended and unintended effects, effectiveness and efficiency of past flood risk management.

Where to find the document:

- FLOODsite report T12-07-03 'Guidelines for the ex-post evaluation of measures and instruments in flood risk management' by Alfred Olfert is available in the publications section of the website www.floodsite.net.

Evaluation in the policy cycle



Ex-post evaluation in the policy cycle of flood risk management

In Brief

The guidelines provide a framework for the ex-post (i.e. after implementation) evaluation of measures and instruments that have been carried out for flood risk reduction.

Criteria, indicators and evaluation methods are provided to help users to evaluate past experience in order to improve flood risk management in the future. The methodology addresses criteria effectiveness, efficiency, robustness and flexibility.

In order to carry out an evaluation of existing interventions, it is necessary to consider the type of intervention and the conditions under which it has performed. The methodology described contains two main elements:

- Indicators describing the effects of management actions, and
- Criteria and methods for the evaluation of these effects.

Application of the methodology should enable practitioners to learn about both the intended and unintended effects of past measures, and determine their effectiveness and efficiency. The methodology also takes account of the robustness of the measures that have been carried out. This is the ability of the measures to perform in a range of known and unknown conditions.

Classification of measures and instruments

The guidelines divide management actions into 'Measures' and 'Instruments'. Measures are direct physical interventions while instruments are changes to the social, financial and institutional contexts of flood risk system. A range of different interventions are considered in the context of different types of water bodies, including rivers, lakes, estuaries and coastal waters.

A web based information tool has been developed that classifies almost one hundred known measures and instruments.

Indicators

Indicators are used to measure the intended and unintended effects of measures and instruments. Within the methodology an indicator set is suggested that includes social, economic and ecological indicators suitable for a wide range of potential measures and instruments. The precise set of indicators required for an evaluation is selected on a case by case basis, depending on the type of intervention studied and the individual set of conditions relevant to a particular case.

A web based tool has been developed that enables the user to select a case specific indicator set.

Criteria

Measures and instruments are assessed using specified criteria. These criteria consider:

- Effectiveness – extent to which objectives are achieved

- Economic Efficiency – cost/effect analysis
- Robustness – performance under different conditions
- Flexibility – operational and long-term flexibility

The guidelines provide methods for determining the values of these Criteria for a specific study.

Methodology

The methodology provides an operational and tested framework for the comprehensive ex-post evaluation of flood risk management measures and instruments. Its application will contribute to the further development of flood risk management and improve our ability to learn from flood risk management measures and instruments carried out in the past.

The FLOODsite project

FLOODsite is an interdisciplinary project integrating expertise from physical, environmental and social sciences, as well as spatial planning and management. The project has over 30 research tasks across seven themes, including pilot applications in Belgium, the Czech Republic, France, Germany, Hungary, Italy, the Netherlands, Spain and the UK. The EC has identified FLOODsite as one of its contributions to the European Flood Action Programme. Further details can be obtained as follows:

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Classification of measures and instruments

