



Knowledge Platform for assessing the costs  
and benefits of flood risk management measures

## Task B: Building the stakeholders' capacity

### Action B2: Collection of background information

#### Form B2\_01

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## I. Presentation and goal of the document

FLOOD-CBA project aims to establish a sustainable Knowledge Platform for the use of stakeholders dealing with the Cost-Benefit Analysis (CBA) of flood risk management measures in the context of different socio-economic environments within the EU. One of the goals of the project is to facilitate the collection, assessment and the exchange of information amongst stakeholders -i.e. Responsible authorities, technical services and scientific community- and provide an overview on current models and best practices. Action B2 helps to reach this goal by collecting and organising background information. In each participating country every partner will undertake the collection of information relative to the methodologies used for assessing the costs and benefits of flood risk management measures. This document has been elaborated to facilitate the compilation and homogenisation of such information. Please read and fulfil this form using all the available information from official sources. Try to be as extensive as possible and provide bibliographic references or internet links if necessary. The information compiled through this form will feed the Knowledge Base Platform of the project and will help to compare the state of the art in the use of CBA for flood risk management in the different FLOOD-CBA participating countries. Furthermore, the results of this exercise will also contribute to B3 (Assessment of stakeholders needs), C3 (Creation of support tools) and D2 (Flood CBA exercise tests).

## II. Respondent Data

- **Country:**
- **Partner's name:**
- **Responsible person:**
- **Information collected with the support of other third parties (e.g. Public Administrations, Agencies, etc) (Yes/No):**
- **If the information has been collected with the collaboration of other third parties, please name them:**

### III. Collection of information

#### 1. Implementation framework of Cost-Benefit Analysis (CBA) applied to flood risk management measures.

1.1) Are there any laws, regulations or official guidance that specifically address the use of CBA of flood risk management measures in your country? Please provide the name, reference number, year and scale of application of the most recent laws, regulations or official guidance.

*Please write your answer here using all the space you need.*

1.2) Do these regulations apply to policies, plans or projects regarding flood risk management?

*Please write your answer here using all the space you need.*

1.3) Are there any official guidance concerning how to perform a Cost-Benefit Analysis of flood risk management measures?

*Please write your answer here using all the space you need.*

1.4) Which is the responsible organisation that monitors the implementation of CBA of flood risk management measures in your country and region? Please indicate the connections among the different responsible levels.

*Please write your answer here using all the space you need.*

1.5) Are Cost-Benefit Analysis applied in a uniform manner across agencies? (In case you have different agencies that deal with CBA).

*Please write your answer here using all the space you need.*

## 2. Cost-Benefit Analysis modelling

### 2.1) General methodological aspects

- Do you have a standard methodological approach to perform CBA of flood risk management measures in your country and/or region? In affirmative case, please indicate the main stages of such approach and the bibliographic references if available.

*Please write your answer here using all the space you need.*

- Which time horizons are generally used for CBA of flood risk management measures? Please specify if the time horizons vary accordingly to the lifespan of the options under consideration.

*Please write your answer here using all the space you need.*

- How many flood alleviation options are normally taken into account? Are all options defined ex-ante or, on the contrary, new options can be added during the CBA process?

*Please write your answer here using all the space you need.*

### 2.2) Valuing methodological issues

- Which parameter is generally used in your country and/or region to compare the economic efficiency of the various options assessed: Net Present Value (NPV), Benefit-Cost Ratio (BCR)

or Internal Rate of Return (IRR)? In case you use different parameters for different purposes, please specify in which cases they are used.

*Please write your answer here using all the space you need.*

- Which type of discount rate approach is generally used? (E.g. fixed rate –vs. - declining discount rate, single discount rate –vs. - a range of discount rates).

*Please write your answer here using all the space you need.*

- How is the discount rate calculated? Please indicate the formula and/or bibliographic reference.

*Please write your answer here using all the space you need.*

### 2.3) Assessing flood damages

- Regarding the loss-probability curve: how many and which flood return periods are generally included? Is there a minimum set of return periods established by national/regional regulations/guidance?

*Please write your answer here using all the space you need.*

- How are flood damages calculated? (I.e. depth-damage curves for buildings, land uses, etc.); Is there any national/regional inventory for flood damages curves?

*Please write your answer here using all the space you need.*

- Are flood losses calculated from historic flood events or by assessing potential losses?

*Please write your answer here using all the space you need.*

#### 2.4) Assessing costs and benefits of the flood risk management measures

- How are the costs of the different flood risk management measures assessed? Which types of costs are addressed? Please list them and specify whether both direct costs (capital, operational, maintenance) and indirect costs are assessed.

*Please write your answer here using all the space you need.*

- How are the benefits assessed? What do they include? E.g. avoided damages (tangible and intangible), direct (properties and goods) and indirect (economic, human or environmental) damages, etc.

*Please write your answer here using all the space you need.*

- Which sectors are analysed in the damage assessment? E.g. Damages to housing, damages to economic activities, damages to agriculture, damages to public buildings, damages to networks and intangible damages (e.g. casualties, human health, environment).

*Please write your answer here using all the space you need.*

- Are non-market costs and benefits assessed? (E.g. of non-market cost/benefits: human health and ecosystem services). If yes, could you describe how? (E.g. using willingness-to-pay, hedonic price method, travel cost method, etc.).

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*Please write your answer here using all the space you need.*

## 2.5) Equity and uncertainty

- Are equity issues addressed in the CBA of flood risk management measures (i.e. different distribution of the costs and benefits among different groups)? If “Yes”, please explain how (e.g. disaggregating the costs among different stakeholders groups).

*Please write your answer here using all the space you need.*

- Is the uncertainty surrounding changing prices in the CBA addressed? If “Yes”, please explain how (e.g. using growth factors).

*Please write your answer here using all the space you need.*

- Are sensitivity analyses performed to test the robustness of the CBA? When are they undertaken: at the beginning or at the end of the process (or both)?

*Please write your answer here using all the space you need.*

## 3. Stakeholders' involvement

- 3.1) Are stakeholders included in CBA of flood risk management measures in your country/region?

*Please write your answer here using all the space you need.*

3.2) Which stakeholders are usually involved?

*Please write your answer here using all the space you need.*

3.3) Do you have any formal or standard procedure to involve stakeholders in your country/region?

*Please write your answer here using all the space you need.*

3.4) Is there any law or regulation that obliges relevant organisations to include stakeholders in flood risk management assessments?

*Please write your answer here using all the space you need.*

3.5) Are stakeholders involved through the whole process or only in some specific stages?

*Please write your answer here using all the space you need.*

#### **4. Limitation of existing approaches and use of alternative approaches**

4.1) Which are the major limitations of using CBA of flood risk management measures? (E.g. Data availability, difficulties to express certain impacts in monetary terms, limited stakeholders' involvement, etc.)

*Please write your answer here using all the space you need.*

4.2) Does your country and/or region currently overcome or compensate such limitations? If "Yes", please explain how.

*Please write your answer here using all the space you need.*



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4.3) Does your country/region use *an alternative method* to CBA when assessing flood risk management measures? (E.g. Cost Effectiveness Analysis, Multicriteria Analysis).

*Please write your answer here using all the space you need.*

4.4) Does your country/region use other approaches *in combination with* CBA? (E.g. Strategic Environmental Assessment, Environmental Impact Assessment, Life Cycle Analysis, Multi-Criteria Analysis, etc.)

*Please write your answer here using all the space you need.*

4.5) In which cases (e.g. types of intervention, scale) do you use alternative approaches to CBA?

*Please write your answer here using all the space you need.*

## **5. Case studies and good practices**

5.1) Please give some experiences or cases studies CBA applied to flood risk management measures in your country and/or region. Please specify the year, location, scale and name of the plan/project and provide a brief description of the process and the results obtained. Provide bibliographic references or webpage links if necessary.

*Please write your answer here using all the space you need.*

5.2) Can you cite some lessons learnt from using CBA for flood risk management measures according to your country and/or region experiences?

*Please write your answer here using all the space you need.*

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## 6. Available support structures and links with other schemes

6.1 Is there any support structure for performing CBA of flood risk management measures in your country and/or region?

*Please write your answer here using all the space you need.*

6.2 Do you have any connections with other schemes regarding CBA applied to flood risk management?

*Please write your answer here using all the space you need.*