

# Common template for risk assessment and management operational tools and best practices identification (Action B1)

Title: Operational Tools and Best Practices for Risk Assessment and Management

The identification of tools and best practices on risk assessment and management helps providing an idea of the state of the art in the field. By completing this form, the best practice will be included in the knowledge repository platforms and available for the practioner community to use. We encourage the user to complete as many fields as possible from the template in order to provide the most relevant information needed to apply the best practice to other practitioners.

Instructions:

- Blue boxes are mandatory fields
- More than one item can be selected in multiple choice boxes

## Document classification

<b>Title</b>	<b>Project IDEA (Improving Damage assessments to Enhance cost-benefit Analyses)</b>
<b>Description</b>	<b>Fundamentals for undertaking a cost-benefit assessment in several European study cases (floods and earthquake risks)</b>
<b>Country, location</b>	<b>Spain, Italy, UK</b>
<b>Date</b>	<b>2014 - 2016</b>
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<b>Institution</b>	<b>Project partners: Politecnico di Milano, Agencia Estatal Consejo Superior de Investigaciones Cientificas (CSIC), Oxford Brooks University, Direcció general de Protecció Civil de Catalunya, Civil Protection Service of Umbria Region</b>
<b>Net Risk Work Partner</b>	<b>CTFC</b>
<b>Document type</b>	<b>Case study</b>
<b>Language</b>	<input type="checkbox"/> Catalan <input checked="" type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> German <input type="checkbox"/> Italian <input type="checkbox"/> Spanish <input type="checkbox"/> Other
<b>Source/origin</b>	<input type="checkbox"/> Partner's expertise <input checked="" type="checkbox"/> Expertise from the network <input type="checkbox"/> Other (internet)

## Topic

Area	<input checked="" type="checkbox"/> Risk assessment	<input checked="" type="checkbox"/> Risk Planning	<input type="checkbox"/> Risk Management
<b>Risk</b>	<input type="checkbox"/> <b>Wildfires</b>	<input type="checkbox"/> Fire behaviour patterns and typologies <input type="checkbox"/> Fire ignition and spread models <input type="checkbox"/> Wildland urban interface	<input type="checkbox"/> Fuel management <input type="checkbox"/> Fire service needs <input type="checkbox"/> Prescribed burning <input type="checkbox"/> Other <i>[Introduce which ones]</i>
	<input type="checkbox"/> <b>Storms</b>	<input type="checkbox"/> First measures after storm <input type="checkbox"/> Work safety during salvage logging <input type="checkbox"/> Timber storage and cost containment <input type="checkbox"/> Forest protection and pest control	<input type="checkbox"/> Regeneration and afforestation <input type="checkbox"/> Preventive sylvicultural measures <input type="checkbox"/> Other <i>[Introduce which ones]</i>
	<input type="checkbox"/> <b>Avalanches</b>	<input type="checkbox"/> Technical protective measures <input type="checkbox"/> Maintenance of protection forests	<input type="checkbox"/> Other <i>[Introduce which ones]</i>
	<input checked="" type="checkbox"/> <b>Floods</b>	<input type="checkbox"/> Prevention through land use	<input checked="" type="checkbox"/> Other

		management <input type="checkbox"/> Technical protective measures	[Cost-benefit analysis]
	<input type="checkbox"/> Other		[Introduce which ones]
<b>Cross-sectoral topics</b>	<input type="checkbox"/> Risk and vulnerability assessment and mitigation <input checked="" type="checkbox"/> Cost-effectiveness assessment <input type="checkbox"/> Civil protection, emergency and post-disaster management	<input type="checkbox"/> Risk planning, governance and policy framework <input type="checkbox"/> Community involvement and risk communication <input type="checkbox"/> Other: [Introduce which ones]	
<b>Level</b>	<input type="checkbox"/> Local <input type="checkbox"/> Regional <input type="checkbox"/> National <input type="checkbox"/> Cross-border <input checked="" type="checkbox"/> EU <input type="checkbox"/> Global		
<b>DRM cycle phase</b>	<input checked="" type="checkbox"/> Prevention <input checked="" type="checkbox"/> Preparedness <input type="checkbox"/> Response <input type="checkbox"/> Recovery		
<b>DRM domain</b>	<input checked="" type="checkbox"/> Policy making <input type="checkbox"/> Early warning system <input type="checkbox"/> Disaster response		
<b>Sendai priorities</b>	<input checked="" type="checkbox"/> Priority 1: Understanding disaster risk <input checked="" type="checkbox"/> Priority 2: Strengthening disaster risk governance to manage disaster risk <input checked="" type="checkbox"/> Priority 3: Investing in disaster risk reduction for resilience <input type="checkbox"/> Priority 4: Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction		
<b>Contribution to Sendai Targets</b>	<input type="checkbox"/> Reduce global disaster mortality <input type="checkbox"/> Reduce the number of affected people <input checked="" type="checkbox"/> Reduce the direct disaster economic loss <input checked="" type="checkbox"/> Reduce disaster damage to critical infrastructure <input type="checkbox"/> Increase the number of national and local disaster risk reduction strategies <input type="checkbox"/> Enhance international cooperation to developing countries <input type="checkbox"/> Increase availability of and access to multi-hazard early warning systems and disaster risk information and assessment		

## Description and analysis

<b>Summary: quick presentation of the Good Practice</b> [Objective: summarize in a few lines the key elements of the good practice]
Place in national/regional policy <i>European project funded under the 2014 call for proposals for Prevention and Preparedness in Civil Protection.</i>
Goals and achievements <i>“To support more effective mitigation measures in the aftermath of a disaster, by analysing damage data according to a forensic perspective; to show how improved data may better inform pre-event risk modelling, so as to develop more reliable cost-benefit analysis of measures that are taken today to prevent a future disaster; to address data on damage to critical infrastructures and economic activities; to develop tools that will enable public administrations to manage damage and loss estimation”.</i>
Actors involved <i>Partners of the project and public administrations.</i>
Implementation stage
State of technical knowledge
Context <i>The Civil protection and Risk prevention regulations needs to provide cost-benefit tools for the risk management. “The IDEA project is based on the assumption that in order to carry out reliable cost/benefit analyses</i>

*of risk mitigation measures, the benefits, that are the avoided losses in case of an extreme events, need to be known and that the proposed estimations entail an acceptable level of uncertainty. In the context of the case studies, C/B analysis of mitigation measures will be carried out taking advantage of the more reliable data that the project will generate.”*

**Detailed Characteristics [Objective: detail the implementation conditions of the Good Practice]**

**Description of the implementation steps**

*First, selecting and meeting relevant stakeholders responsible for damage data collection and management. Second, analyse the already available data and completed as much as possible. Third, select specific and relevant case studies. Fourth, identify what were the main drivers of the disaster according to forensic analysis. Fifth, provide the logic architecture of an information system enabling stakeholders to carry out the activities of forensic investigation, compensation to victims and reconstruction, and pre-event modelling using improved damage data.*

**Governance**

**Necessary means to implement the Good Practice in efficient conditions**

*Available data base.*

**Challenges encountered during implementation and solutions incurred**

**Priorities identified for successful implementation of the Good Practice**

**Impact of the Good Practice [Objective: evaluate the impact of the Good Practice].**

*To provide tools to the public administration to carry out an more cost-benefit risk management. This situation allows a more efficient management of the public resources.*

**Future developments [Objective: understand the follow-up perspectives]**

*(Expected results of the project:) « Design of an enhanced information system easy to embed in administrative procedures to enable stakeholders carry out cost-benefit analyses of recovery and reconstruction investment; Application of the enhanced tools and methods on case studies in the three countries of the partners, showing how proposed solutions are not only tailored to the financial instruments used to compensate damage in the time ranging from emergency to reconstruction, but also provide better input for pre-event scenario modelling; Recommendations and guidelines for authorities applying for solidarity funds after disasters either at a national level or to the European Commission. »*

**External resources [Objective: provide further information]**

**Attached materials**

**Web links**

<http://www.ideaproject.polimi.it/>

**Contacts**

**[Additional information - optional]**

<b>Lessons learnt</b> [ <i>Objective: compare the results obtained to the objectives set at the start of the Good Practice</i> ]
Evaluation process, if exists (internal or external)
Assessment of results (quantitative and qualitative) and comparison with main goals
Negative aspects identified
Unexpected consequences (short / mid / long term) and corrective measures implemented

<b>Durability and transferability</b> [ <i>Objective: evaluate the integration of the Good Practice and its sustainability, give recommendations for transferability</i> ]			
<b>Is this information:</b>	<b>Replicable</b> <input type="checkbox"/>	<b>Measurable</b> <input type="checkbox"/>	
Regulatory Framework			
Stability of the human environment			
Financial requirements			
Success factors			
Risk factors			
Additional and non-formal experiences contributing to the implementation of Good Practice			