



# Planning of Participatory Multi-Criteria Assessment

**Laura Elisabeth Drivdal  
Johannes Oldervoll  
Niels-Kristian Tjelle Holm**



The RECIPES project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824665

## Authors

Laura Elisabeth Drivdal, UiB

Johannes Andresen Oldervoll, UiB

Niels-Kristian Tjelle Holm, DBT

Manuscript completed in July, 2021

Document title	Planning of Participatory Multi-Criteria Assessment
Work Package	WP3
Document Type	Deliverable (Demonstrator)
Date	31 July 2021
Document Status	for approval

## Acknowledgments & Disclaimer

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 824665.

Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of the following information. The views expressed in this publication are the sole responsibility of the author and do not necessarily reflect the views of the European Commission.

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the publisher is given prior notice and sent a copy

## Table of Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Situating the multi-criteria assessment within RECIPES	1
1.2	RECIPES Task 3.3 and the multi-criteria assessment	1
<b>2</b>	<b>Planning the multi-criteria assessment</b>	<b>2</b>
2.1	Assessing guidelines in relation to perspectives	2
2.2	Participatory multi-criteria assessment	2
2.2.1	Selecting criteria for the participatory MCAs	3
<b>3</b>	<b>Works Cited</b>	<b>5</b>

## List of abbreviations

<b>CA</b>	Consortium Agreement
<b>CC</b>	Consortium Committee
<b>DOA</b>	Description of Action
<b>GA</b>	Grant Agreement
<b>MCA</b>	Multi-Criteria Assessment
<b>PCG</b>	Project Coordination Group
<b>PO</b>	Project Office
<b>WP</b>	Work Package

# 1 Introduction

This document presents the planned developments of Task 3.3 in Work Package 3 of RECIPES. RECIPES is an EU-funded project aimed at strengthening the precautionary principle, ensuring its ability to drive responsible innovation. One output of RECIPES will be a series of guidance documents pertaining the Precautionary Principle. In this document, we outline a plan for participatory assessment of these guidance documents. The presented plans will be executed during the autumn of 2021.

## 1.1 Situating the multi-criteria assessment within RECIPES

RECIPES is a three-year EU-funded project focusing on the precautionary principle and its relation to innovation. Previous stages of the project have entailed (1) a stock-taking of the Precautionary Principle internationally and at the EU-level; (2) 9 case studies investigating the applied precautionary principle and relationship with innovation; and (3) a stakeholder needs assessment, mapping positions and needs of stakeholders affected by, or knowledgeable on, the precautionary principle. On the basis of these previous stages, a set of guidelines and tools<sup>1</sup> for the future application of the precautionary principle will be developed. It is under this development phase that a participatory assessment process will be conducted to strengthen and evaluate the guidance documents drafts.

## 1.2 RECIPES Task 3.3 and the multi-criteria assessment

The MCA task is specified in the RECIPES grant agreement under task 3.3 as part of WP3.

### Box 1: Description of task from RECIPES proposal

Task 3.3: Participatory multi-criteria-assessment and final co-development of tools and guidelines

This task will facilitate the assessment of the tools and guidelines and finalize\* their development.

First the impacts of the proposed tools and guidelines will be assessed from several interlinked perspectives, namely from a risk-benefit perspective, a public value perspective, an economic, RRI and an ethical perspective.

Then the tools and guidelines will be scrutinized in a participatory multi-criteria assessment, inspired by the DESSI decision support tool, in order to ensure that the respective tools and guideline are of relevance and acceptable for the different stakeholders. A two-day workshop will be held, where a large and dedicated group of diverse stakeholders discuss the different elements of the respective tool, and each individually assess the value and relevance for them, and point at possible problems. Following the initial assessment the stakeholders will in groups co-create suggestions for solutions in the areas where the tools and guidelines are out of scope or lack important aspects and suggest final adjustments based on the assessments.

\* The tools and guidelines will be finalized in the context of WP3, but will be developed further in WP4

From this task description, we find that task 3.3 consists of two steps: (1) Assessing the guidance documents in relation to several relevant interlinked perspectives, and (2) Organising participatory Multi-Criteria Assessments in for evaluating the relevance and acceptance of the guidance documents.

---

<sup>1</sup> The documents that present guidelines and tools are referred to as guidance documents in RECIPES

## 2 Planning the multi-criteria assessment

In this chapter, the main ideas and plans for the completion of task 3.3 are explained. As established in the previous chapter, the task has been interpreted as a twofold exercise, which the structure of this chapter reflects.

### 2.1 Assessing guidelines in relation to perspectives

The first assignment of task 3.3 requires that the *impacts of the proposed tools and guidelines will be assessed from several **interlinked perspectives**, namely from a risk-benefit perspective, a public value perspective, an economic, RRI and an ethical perspective*. This assessment will be carried out by the task leaders of T3.3 in collaboration with the meta-theme leaders developing the tree guidance documents, where the focus will be to evaluate how the guidelines relate to those perspectives. The results from these discussions will inform the second assignment of task 3.3. For example, both the RECIPES guidance on organization of expertise and participation relate strongly to the concepts of RRI and public value. The RECIPES guidance on extent in application relates more to perspectives such as trade-offs between risk and benefit.

### 2.2 Participatory multi-criteria assessment

The second assignment of task 3.3 aims to "*ensure that the respective tools and guideline are of relevance and acceptable for the different stakeholders*". In order to fulfil this aim a participatory MCA will be carried out. Multi-Criteria Assessments (sometimes called Multi-Criteria Evaluation, Multi-Criteria Analysis or Deliberative mapping) can broadly be defined as assessment tools that can be used for assessing policy options (White, 2017; Antunes, 2017). Multi-criteria evaluation emerges from the insight that cost-benefit analyses tends to overemphasize economic efficiency over other salient societal goals, values and priorities (Greco & Munda, 2017). Because these tools are meant to augment and broaden the cost-benefit approach to the selection of policy options, these tools are particularly suited for the participatory and deliberative assessment of identified policy alternatives (e.g. selection of infrastructural improvements in the face of climate change).

However, while multi-criteria assessments commonly are applied to assess *policy options*, our task is to assess *guidance documents*. Generally speaking, the guidance documents seek to provide insight into how the precautionary principle has been and should be interpreted. The documents do not present range of options where the outcomes could be measured, assessed or compared, and they are thus ill-suited for formal comparative assessment of possible outcomes. The guidance documents are well suited for an open-ended deliberation on their meaning, validity and potential implications. What we derive from the literature on MCA is an emphasis on *participation, deliberation and collaborative mapping* (White, 2017; see also [Methods vignettes: multicriteria mapping](#)) of concerns. This fits well with the RECIPES grant agreement description of the task (box 1), where it is stated that stakeholders should "*discuss the different elements of the respective tool, and each individually assess the **value and relevance** for them and point at possible problems*". To reach the aim of assessing the usefulness of the guidance documents, it is important not to reduce the participation to a 'ticking boxes' exercise, but to enable open discussions where important insights may emerge. The participatory MCA will therefore, in short, be formatted to enable group discussions, using criteria as talking points and guiding questions.

As the RECIPES project currently is developing three different guidance documents, three participatory workshops will be held during September 2021, one for each guidance document, where around 5 to 10 stakeholders will be invited to participate. The discussions

will be facilitated digitally, with the aid of DESSI<sup>2</sup> – a tool for structuring and documenting discussions while ensuring transparency and visible progression among the participants. While DESSI is designed for regular MCAs, the transparent design and self-documenting features of the tool make it useful for more open-ended approaches as the one outlined above as well.

### 2.2.1 Selecting criteria for the participatory MCAs

As stated above, the RECIPES proposal points out that ‘value’ and ‘relevance’ are essential criteria that the participants should assess to the guidelines in relation to. It is important to be mindful that previous participatory processes have been executed in RECIPES and clarify how the participatory MCA differs from and complements these consultations. While previous consultations have focused on more general aspects of the guidance documents, such as rationale and aims, the MCA will revolve around the specific guidelines and tools. As the guidance documents still are developing, selecting specific criteria for assessing the guidelines and tools requires an iterative process. Some criteria may be generalized across all three guidance documents, while others only make sense in the context of a certain meta-theme. Therefore, the task of selecting criteria entails both a generalization of trends across the three guidance documents, as well as identification of specific criteria for each guidance in close consultation with its respective author. Currently, three generalized criteria have been identified for assessment of all the three guidance documents:

1. Is the guidance document **accessible**? Is the guidance document written in an too academic language? Could the document benefit from a more popular and accessible language? Has there been sufficient efforts to provide guiding meta-text and provide the reader with information on structure, intent, and content? This point also regards the length of the guidance document, which should be kept short and concise. The aim of the guidance is not to provide the entire knowledge basis for our guidelines and tools, but to provide the appropriate amount that is necessary to understand the guidelines and tools and how they are evidence-informed.
2. Is the guidance document **appropriately concrete**? The guidance should provide tangible guidelines and tools for the application of the precautionary principle. Exemplary (imaginary) cases that follow our guidelines and/or tools may be suitable. Is the intended use of the guidelines and tools adequately clear? Are the guidelines sufficiently workable?
3. Is the guidance document **appropriately situated** in the current context of RECIPES and the debate on the precautionary principle as a whole? Are the guidelines and tools sensible, considering the aim of RECIPES – or are they potentially out of scope? Can we expect that a given guideline or tool will be picked up considering current trends in the discussion on the PP? Can the RECIPES guidances promote precautionary decision-making and responsible innovation?

Other criteria may be applied, if deemed appropriate. Examples of this could be the criteria of practicality, accuracy, or more open-ended criteria, such as what kind of outcomes the application could have for the precautionary principle and responsible innovation. These additional criteria will be identified progressively, as the guidance documents are being further developed. The following sub-chapters describe each of the three guidance documents, from which additional criteria will be identified.

The following sections outline the three RECIPES guidance documents that are being developed, and to which the MCA will be applied. These guidances address respectively: organisation of expertise, participation and scope of application of the PP.

---

<sup>2</sup> For more information about DESSI, please visit <http://securitydecisions.org/>

### **2.2.1.1 Organization of Expertise**

This guidance document starts from the observation that there are ongoing discussions about what forms a credible and legitimate science and knowledge basis to invoke the precautionary principle in EU risk regulation, to assess complex and uncertain risks, and inform decisions on precautionary measures. It deals with questions of the level of evidence needed to apply the precautionary principle, on whether the principle plays a role also in risk assessment, on the nature of the knowledge-values-nexus in risk assessment and risk management, and others.

The document seeks to provide guidance on how to broaden the knowledge base so as to strengthen society's capacity to identify and manage scientifically uncertain but plausible and serious threats. The guidance addresses the observation that precautionary measures are frequently taken too late, and often in a restrictive and piecemeal fashion. In this respect, it points to ongoing efforts to defragment the regulatory system, and to provide some guidance on how these efforts can be strengthened to reduce risk migration and regrettable substitution.

Another main part of the guidance seeks to highlight how the precautionary principle fits into the knowledge production system more broadly, beyond regulatory science and the assessment of and management of risks. This section is yet to be fully fleshed out, but themes covered include the relationship between precaution and responsible research and innovation (RRI), as well as broader efforts to substitute harmful products and processes for more sustainable options.

### **2.2.1.2 Participation**

This guidance document delves into the identified issue that current efforts of participation are not sufficiently transparent nor inclusive of vulnerable stakeholders. The guiding intuition behind this sub-theme is that the legitimacy and credibility of assessment and management processes at the EU and national levels can be strengthened through enhanced participation and civic engagement. At the same time, civic engagement can strengthen both scoping and assessment processes by broadening the knowledge base, and by encouraging transparent and accessible deliberation on what is at stake.

The guidance does not seek to develop a rigid set of rules and criteria for the facilitation of public deliberation. It seeks to underscore that there are many ways of engaging in participatory assessment and decision-making, and that facilitators must remain sensitive to the subject at hand. Nevertheless, a central tenet of the guidance is that public inclusion should be strengthened and prioritized earlier in innovation as well as assessment processes.

### **2.2.1.3 Scope of Application of the PP**

This guidance document is divided into two sections. The first section seeks to provide tentative guidance on how the precautionary principle has come to be understood and applied in a European context. It starts from the intuition that the strength of the precautionary principle lies in its open-endedness. It goes on to demonstrate that the principle does not imply an "anything goes"-approach to policy-making, by describing how scientific uncertainty and serious risks are interpreted by decision-makers and the courts. The section provides a characterization of precautionary risk management processes, and

seeks to situate the principle vis-a-vis the principle of proportionality, impact assessments and cost-benefit balancing.

The second part of that guidance starts from the intuition that societal innovation pathways will always be hemmed in by legal restrictions and the societal acceptability of novelty and risks. In the context of man-made climate changes and adaptation, the precautionary principle can be said to serve as a compass for innovation in Europe. It is a tool that can help steer society towards more sustainable innovation pathways.

### 3 Works Cited

- Greco, S., & Munda, G. (2017). Multiple Criteria Evaluation in Environmental Policy Analysis. In C. L. Spash, *Routledge Handbook of Ecological Economics* (Vol. I). London: Routledge.
- Antunes, P. (2015). *Multi-criteria assessment*. Retrieved from Environmental Justice Organisations, Liabilities and Trade: <http://www.ejolt.org/2015/02/multi-criteria-assessment-mca/>
- White, R. (2017) Multicriteria mapping. In C. L. Spash, *Routledge Handbook of Ecological Economics* (Vol. I). London: Routledge