

RECIPES

Precaution • Innovation • Science

**Digital Workshop on  
Reconciling Precaution  
and Innovation**

**Workshop Information Package**



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## The Recipes project

The EU Commission strives to be on the forefront of scientific excellence and has as part of the EU Horizon 2020 research initiative launched the project RECIPES "REconciling sCIence, Innovation and Precaution through the Engagement of Stakeholders".

RECIPES aims to analyse how the precautionary principle is applied in the European Union and improve its future application with recourse to participatory methods. The RECIPES project intends to reconcile innovation and precaution by developing tools and guidelines to ensure the precautionary principle is applied while still encouraging innovation.

The project includes collaborators in more than 11 countries in Europe and beyond.

The digital Workshops are organized by the Danish Board of Technology Foundation (**DBT**).

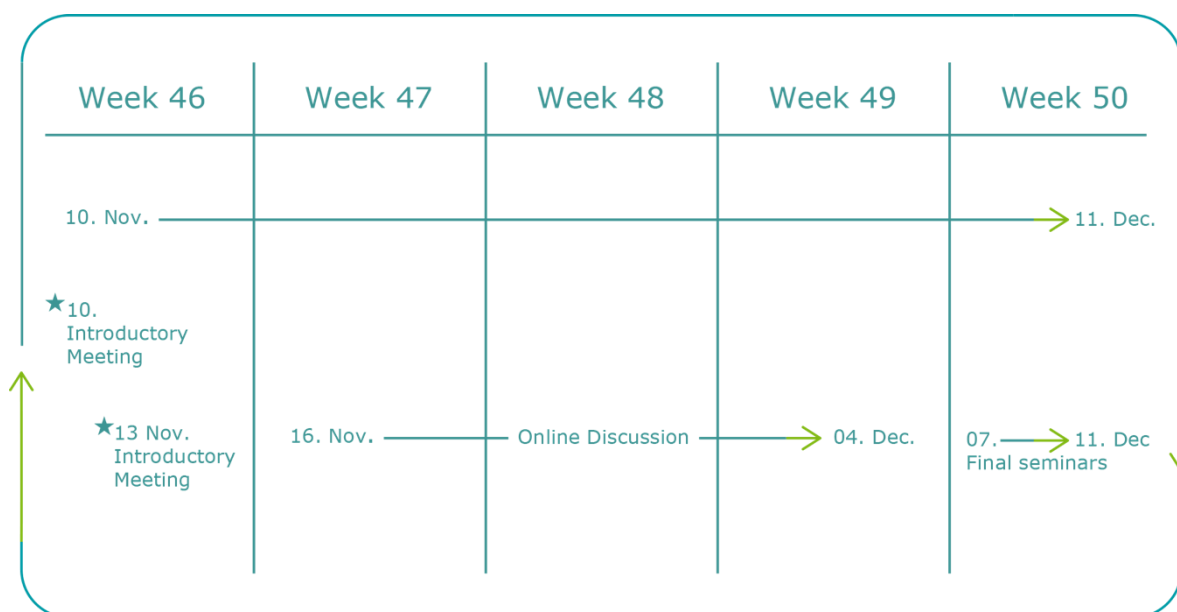
DBT is a non-profit, common good foundation, with more than 30 years of experience in stakeholder involvement in research and innovation.

For more information please visit <https://recipes-project.eu/>

## Introduction

We are very excited for you to provide your input on the development of tools and guidelines for the future implementation of the precautionary principle. The overarching goal of the workshop is to identify tools and guidelines for the EU and its member states to best govern uncertain risks related to innovation, with a focus on the precautionary principle. This workshop information package consists of two documents. This, the first document, aims to set the scene for the upcoming engagement process. The second document will be distributed shortly before the introductory meetings and aims to structure the discussion. It is built on the conclusions drawn from previous research and workshops. To create an informed and fruitful discussion we thus aim to provide a useful and informed starting ground for you. The rest of this document consists of two sections: Firstly, an timeline of the events that you are expected to follow during the fall of 2020. Secondly, a contextualizing text, which sets the scene for the RECIPES project.

## Timeline



As the figure illustrates, this workshop can be subdivided into three elements. We will begin with an introductory meeting set on the 10<sup>th</sup> or the 13<sup>th</sup> of November depending on your preferred date. Here, you will be introduced to the workshop as well as the online platform on which the following part will take place. This online platform allows you to voice your opinion and partake in a discussion with other stakeholders, moderated by the RECIPES team. You are free to participate whenever it suits you during the course of three weeks, however we expect an active engagement from your side. Lastly, a set of final seminars will be held between the 7<sup>th</sup> and the 11<sup>th</sup> of December. The precise dates and themes for the seminars will be developed and decided on during the workshop. For any questions regarding the engagement process, the Danish Board of Technology will be ready to assist you and more information will be provided before and during the introductory meetings.



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## Setting the Scene

The implementation of the precautionary principle in the EU from 2000 until today is being examined in the RECIPES project ("Reconciling Science, Innovation and Precaution through the Engagement of Stakeholders") which is funded by the EU Horizon 2020 program.

Based on this assessment the project aims to provide tools and guidelines for the future implementation of the precautionary principle which will encourage broad and democratic participation and thus support socially desired and sustainable innovation.

The input from the project is developed in an iterative process involving a wide range of representatives from the public, the private sector, civil and non-governmental organizations, administrators and experts. This involvement includes, but is not limited to, a workshop, using scenarios based on previous academic studies, to be found at <https://recipes-project.eu/results>.

## The Precautionary Principle – A Historical Perspective

The precautionary principle was established in the EU as an overarching environmental legal principle in the Maastricht Treaty in 1992. Today it is integrated in the Treaty on the Functioning of the EU (Article 191(2)) and in a number of EU policies, strategies and regulations, predominantly related to protection of the environment and public and occupational health. It also occurs and plays a significant role in many of the member states' policies, laws and practices, as well as a variety of international treaties.

The principle reflects the priority given in the EU to protection of citizens, environment and nature. Compared to other major economies, the legal status and implementation of the principle is unique and presents a different approach than for instance in the US, where protection of the environment and health is mostly handled by the means of private law suits.

## Implementation of the Precautionary Principle in the EU

Implementation of the precautionary principle in the EU is first and foremost guided by a communication from the European Commission from 2000, which, although being a non-binding document, constitutes an important codification of the EU institutions' understanding and agreement on the principle. In 2017, the Commission further released its Better Regulation guidelines which also support the practical implementation of the principle (Better Regulation toolbox no.15).

In the RECIPES overall analyses of the implementation of the principle since 2000 and in 5 RECIPES member state studies it was found that the principle in several situations was not systematically and consistently implemented at both political, administrative and legal levels.

This was further demonstrated in 9 RECIPES in-depth case studies on application of the principle in relation to specific products and technologies, namely: glyphosate, neonicotinoid insecticides, endocrine disruptors, microplastics, genetically modified crop plants, CRISPR-Cas9 based gene drives, nanotechnologies, artificial intelligence in healthcare and the financing of water infrastructure developments.



## Needs for Improvement

The studies suggest that perceived inconsistencies in risk assessments and decision-making can stem from lack of a common and clear understanding of the core of the principles and of the prerequisites for its invocation.

Thus, better understanding was called for regarding:

- “risk of significant damage”, including threshold levels of harm that should trigger invocation
- situations where “scientific uncertainty” must be said to exist
- situations in which application of new scientific knowledge shall be considered and applied in previously settled cases (e.g. in the case of glyphosate)
- how and to which extent considerations on proportionality and on potential costs and benefits shall be taken into account in the application of the PP

Due to the lack of a more precise and common understanding of these concepts and conditions, risk assessments and decision-making regarding invocation of the principle in the EU are often characterized by complicated and, to some extent, uncertain and long-lasting processes (e.g. decisions on microplastics, glyphosate, endocrine disruptors, GMOs).

During workshops, a need was also identified for clarification on how the precautionary principle should be applied with regard to new and emerging technologies, such as artificial intelligence, nanotechnologies and new biotechnologies (e.g. precision-genome-editing, including CRISPR-Cas9 and gene-drive).

Currently, these technologies and the new products stemming from them are mostly regulated under already existing regulatory frameworks related to for instance chemicals or GMOs, but the development within the emerging technologies is fast and radical and may pose new kinds of risk which are not sufficiently considered and assessed under the existing regulatory frameworks. These frameworks may therefore soon have to be revised and expanded, or brand new and more tailor-made regulatory frameworks may be needed.

## Aligning precaution with today’s challenges

The political focus on the precautionary principle has further increased in recent years as some European industry associations have expressed concern about their competitiveness in the global market being hampered by the way the principle is implemented in the EU. As a consequence, they advocate for the introduction of an “innovation principle” in the EU *acquis* to supplement the precautionary principle by ensuring that also job creation and economic growth aspects are analyzed before policy decisions are made regarding approval or disapproval of new technologies and products.

While the European Commission has generally endorsed this idea as a policy approach and has introduced it in legal text, i.e. in the Horizon Europe Regulation, other stakeholders such as consumer associations, legal scholars and green NGOs see no need for this principle. These stakeholders find that the precautionary principle already stimulates desirable innovations by pushing industries towards development and marketing of safe and sustainable alternatives.

Regardless of various perceptions of the precautionary principle, there seems to be widespread support for the EU having an innovation-friendly regulatory regime which can stimulate desired and needed sustainable innovations towards greener, circular and bio-based production and consumption.




Photo by Ben Neale on Unsplash

## **Final Remarks**

This document should have provided you with an understanding of the program that you will partake in during the fall of 2020. Additionally, it should aid your understanding of the context of the RECIPES project, as well as our need for your involvement as a stakeholder.