

Checklist and guiding questions

Developing and evaluating climate services for adaptation

January 2025



About the guide: what, why and for whom?

This guide is intended for climate service producers and other stakeholders developing a climate service. Through guiding questions and a checklist, this guide helps to think about success criteria during the climate service development process and evaluate them after implementation. This can lead to a more successful climate service, it supports learning processes, and it makes evaluation after implementation easier. This guide is structured according to four related activities that are typically part of climate service development processes, see Figure 1.

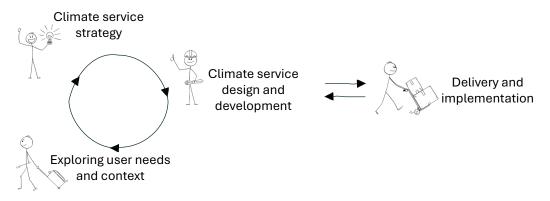


Figure 1: Typical climate service development processes

The guide is based on 12 climate service success criteria presented in Figure 2. These criteria were identified by engaging experts from all over the world (see https://doi.org/10.1016/j.envsci.2023.103641). An evaluation framework with indicators and metrics for each criterion is available through eva@climateadaptationservices.com.

Checklist

Climate service strategy

☐ Evaluated success criteria

□ Clearly defined users
□ Clearly defined goals
☐ Defined evaluation approach , including success criteria
☐ Validated suitable interaction approach
Exploring user needs and context
☐ Identified relevant timelines for climate service delivery and use
☐ Identified user requirements for accessibility , relevance and credibility
□ Established baseline for defined goals
Climate service design and development
☐ Validated suitable communication format
☐ Communicates about uncertainty sources and interpretation
☐ Identified practical climate service application(s)
☐ Identified opportunities to maximize adaptation - minimize maladaptation
Delivery and implementation

☐ Identified strategies to increase the **reach** of the climate service



Guiding questions



The climate service strategy involves making decisions about the users and the goals of the climate service. The more specifically formulated, the better they can inform development and evaluation. It may involve multiple iterations to reach a clear definition of users and goals. Also, consider who will be engaged in the development and how. Finally, reflect on the evaluation criteria, add criteria if needed, and identify opportunities to collect data.

Users

• Who are the users targeted by the climate service? If possible, specify group size, role(s), subgroups, age and other relevant characteristics.

Goals

What do you aim to achieve with the climate service in terms of:

- The knowledge level of the users on a specific issue
- The climate service capacities of the users
- The benefits for the users
- How users use it to inform their decision-making

Interaction method

- Who will you engage in the development process, and how often and in what way will you interact?
 Discuss and validate your approach with user and other engaged stakeholders.
- How can the process design support trust building between engaged stakeholders?

Evaluation approach

- Are the 12 criteria in Figure 2 sufficient to evaluate the success of the service, or should criteria be added?
- What are opportunities in the development process to collect data about the indicators? Think of workshops, meetings, and surveys that can be used to ask for (intermediary) feedback.

Exploring users' needs and context involves identifying relevant timelines as well as characteristics that influence the extent to which a climate service appeals to them. More broadly, it involves taking stock of users' challenges and wishes, their knowledge and capacity levels, and their current ways of decision-making and actions to identify relevant gaps and needs. The latter is needed to define a baseline for the formulated goals.



Timelines

What are possible relevant timelines for the user to deliver the climate service?

Climate service requirements

What are important determinants, conditions, or requirements for users regarding:

- The accessibility of the climate service
- Relevant information
- Credible information

Baseline

What is the state of the user group regarding:

- The knowledge level relevant to the climate service topic/issue
- The climate service capacity level relevant to the climate service topic/issue
- The anticipated/desired benefits
- Current process of and knowledge use in decision-making for adaptation





Climate service design and development Climate service design and development is about identifying possible solutions to an identified need or gap and working towards a climate service that supports this. It involves considering and testing suitable communication formats, ways to communicate about uncertainty, possible applications of the climate service, and promoted adaptation solutions.

Communication format

• What could be suitable communication formats for the targeted users? Discuss and validate different options with the targeted users.

Communicating uncertainty

• In what possible ways can you 1) communicate about the sources of uncertainty and 2) provide guidance about how to interpret this information?

Possible applications

• In what way(s) can the targeted users practically apply the knowledge from the climate service to address a certain need/gap?

Promoted adaptation solutions

• What type(s) of perspective or action towards adaptation is promoted by the climate service? To what extent may this support adaptation or maladaptation.

Delivery and implementation is about making the climate service available and operational so that it can be used by the targeted users. It involves considering further ways to increase the accessibility, for example through active communication and distribution. After the implementation, the success criteria can be evaluated, which may lead to the identification of improvements.



Accessibility

In what possible ways can the targeted users be reached?

Monitoring, Evaluation, and Learning

How successful is the climate service? Figure 2 summarizes 12 climate service success criteria and indicates whether objective evaluation, user or producer opinion, or Evaluation by a combination of these is needed. **Evaluator** Users Success criteria analyses / evaluates evidence perception of success perception of success Interaction is tailored to context Timely delivery Relevant information Credible information Accessibility Communication format tailored to users Acknowledgement and communication of uncertainty Increased understanding on an issue by users Increased capacity to use climate services Benefits for the user Better decision-making for adaptation

Figure 2: Overview of success criteria and how they are measured

Relationship of trust between user and producer