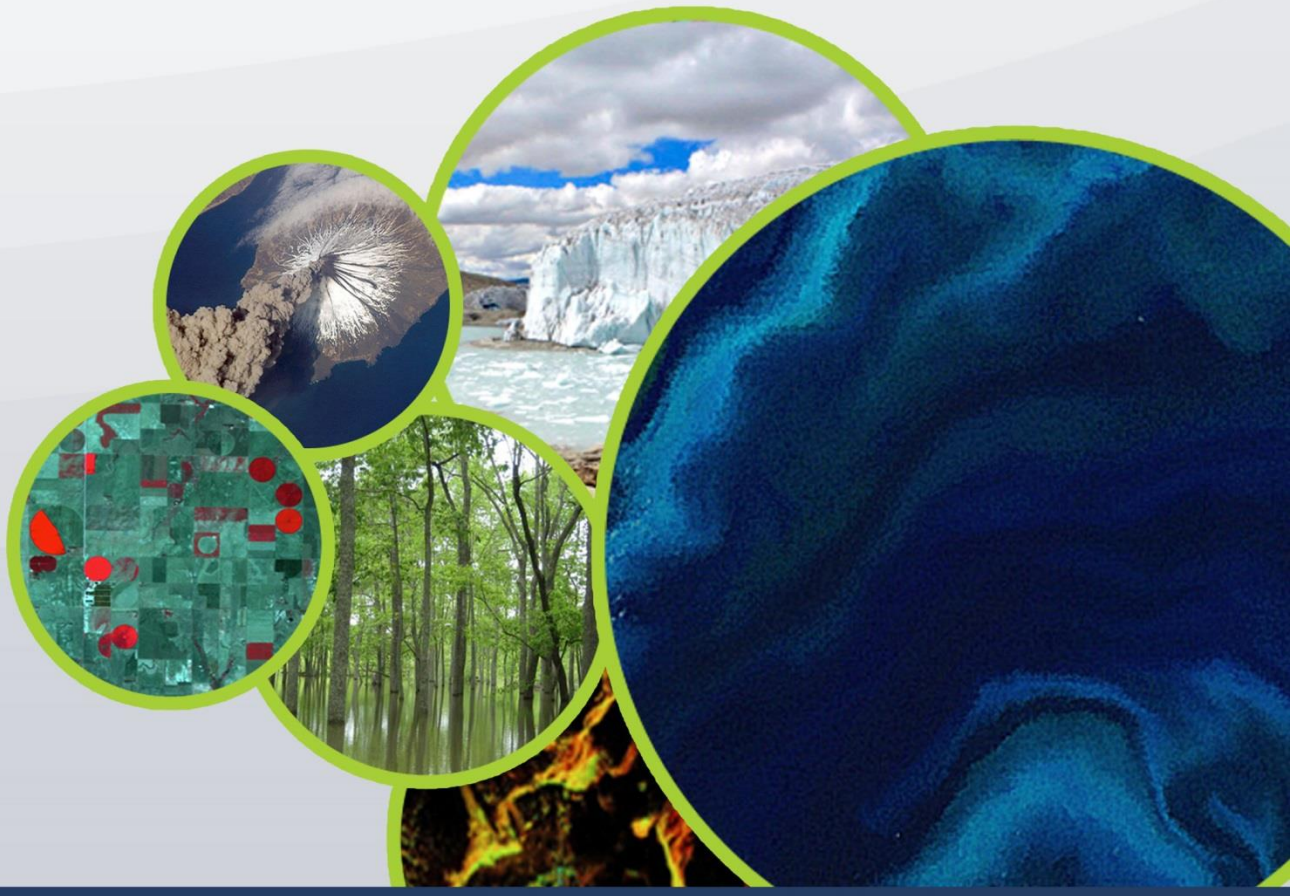
Committee on Earth Observation Satellites



CEOS Webinar Toolkit

Needs Assessment Guide

May 2021 | Version 1.0

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Version Control

Version #	Authors	Purpose/Change	Date
0.1	Lauren Childs and Shilpa Kannan (NASA)	Initial Draft	Feb 2021
1.0	Sydney Neugebauer (NASA)	Finalized Draft	May 2021

CEOS Webinar Toolkit Introduction

In support of the CEOS mission and goals, the Webinar Toolkit serves to provide CEOS working teams with a foundation of resources to better promote and present CEOS work and initiatives. The WGCapD's collective experience in effectively designing and hosting webinars has been compiled in this document to support the strengthenining and branding of CEOS webinars. This CEOS webinar creation guide is intended to be a living document, for exchanging experiences and sharing knowledge.

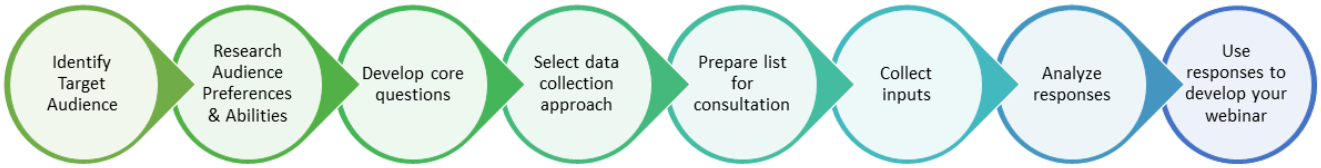
Purpose

The Needs Assessment portion of this toolkit is a vital step that allows webinar creators to effectively tailor a webinar's structure, materials, and timeline by thoroughly understanding and addressing common needs and issues identified by the target audience. This primarily involves developing a line of communication with prospective audiences that will allow potential participants to provide useful input. Content from CEOS activities and materials can then be compiled and prepared based on the information collected, to help facilitate robust and effective webinars.

The purpose of a needs assessment is to identify interests, needs, requirements, and knowledge gaps in the broader community so that you can tailor your webinar in response. An effective assessment will help direct you to the areas of greatest demand. A needs assessment is the process of identifying the "gap" between what is currently known and available and desired knowledge, skills, and abilities.

Needs Assessment Steps

Overview of the needs assessment process:



1. Identify Target Audience

The first step in developing a Needs Assessment is to identify the target audience that will partake in the webinar. This can be determined through analyzing multiple factors such as (but not limited to) organizational sector, ideal age range or career stage of participants, level of expertise required for the subject matter presented, and geography.

Fundamental questions to ask in identifying audiences for consultation are:

- Who has the need and/or willingness to make use of the information?
- Who has valuable information, experience, insight or perspective to shape the webinar?
- Who are the key decision-makers, implementing partners, users, and intermediaries whose support or involvement will ensure success?
- Who has the potential to benefit the most from this webinar, and how can their views be represented?
- How can you ensure that you're incorporating diverse voices during this process?
- Who has resources to utilize information gained from webinar?

To think strategically about audiences, it may also be useful to consider people and institutions with:

- Relevant technical knowledge
- Experience or work in similar areas and activities
- Ability and/or mandate to act using the information shared in the webinar
- Power to catalyze interest and support

- Potential to benefit from information shared in the webinar or connected to those who can benefit

2. Research Audience Preferences & Capabilities

Review existing resources: In order to build on the work of others, consult with known stakeholders, other CEOS working teams, partner organizations, etc. about similar consultation exercises and projects. Conduct a literature review of relevant technical assessments, workshop reports, journal articles, government publications, etc.

3. Develop Core Questions

Once an ideal audience segment is determined and initial research complete, the next step is to develop a plan to gauge the interests and needs of your audience. This typically begins with the identification of a set of core questions to which the response will inform your decision-making related to the webinar development. Creating a diverse set of questions is key to ensuring that the webinar effectively connects with your audience. Through this manner, the construction, design, and delivery of the webinar may be adjusted to better suit common perspectives and circumstances faced by webinar participants. As a means of securing buy-in early on, consider sharing a draft of the webinar concept for their input.

4. Select Data Collection Approach

There are multiple formats you can use to conduct a needs assessment, such as those listed here. Additional information can be found below.

- Surveys
- Questionnaires
- Self-Assessments
- Focus Groups
- Workshops
- Interviews
- Observations

5. Prepare list for Consultation

Begin a preliminary list of organizations and individuals from which to collect inputs. Collaborate within the CEOS working teams and other partners to begin developing the list of people and institutions to consult.

6. Collect Inputs

Distribute the questions using your selected approach clearly stating a deadline for the collection period. Centralize data collection within 1-2 team members for simplicity. Sending out a reminder one week or the day before the deadline can be helpful when conducting virtual surveys or questionnaires as respondents often wait until the end to respond to such requests.

7. Analyze Responses

Review responses to your questions, group similar responses, review outliers, and pull out general themes and ideas present. Use the information to refine your webinar's awareness building and learning objectives, topics included, platform to be used, timing for when you offer the webinar, etc.

8. Develop Webinar

Use the needs assessment to inform the creation of your webinar content.

Needs Assessment Approaches

As previously mentioned, some of the many forms of generating Needs Assessments include constructing a survey, conducting interviews, or holding workshops. The survey method is an ideal option for those interested in gathering general information quickly through virtual means. It also allows for easier data collection when done through online forms. In comparison, although interviews may take longer to set up and conduct, it opens

up opportunities for interviewees to describe specific thoughts with fewer limitations for expression. Holding a workshop is desirable for those who would like the benefits of receiving detailed information found in interviews, but may not have the time or resources to individually set them up. This permits further opportunities for facilitating group discussions over collective interests, while also developing room for collaboration in solving common problems.

Surveys & Questionnaires: Considerations –

- ✓ Generally use a standardized format and can be done electronically, in writing, or by phone
- ✓ Easily conducted virtually using free or inexpensive software
- ✓ Return rate on virtual surveys is typicall low
- ✓ Technical questionnaires can be helpful when specific technical information is needed from a range of institutions
- ✓ Effective for testing existing baseline information
- ✓ Optional links can allow interested respondents to participate in further surveys or report outcomes
- ✓ Survey Dos:
    - Ensure straightforward, unbiased wording of questions
    - Include a broad range of answer options
    - Select simple, concise phrases for easier interpretation
    - Use open-ended questions for deeper understanding
    - Keep length to a minimum to encourage completion
    - Maintain a logical organization of the order/grouping of questions

Interviews: Consideration –

- ✓ Can range from in-person, voice call, and video chat
- ✓ Inexpensive approach that should yield feedback from a small but representative audience
- ✓ A limitation is that these interviews can be time-consuming
- ✓ Can be helpful in individual meetings with key influencers as a means of gathering consistent information
- ✓ Recording responses can be helpful to refer back to – best practice: obtain permission before recording
- ✓ Note key details that may impact overall outlook relating to your webinar
- ✓ Explore important topics introduced by interviewee

Workshops & Focus Groups: Consideration –

- ✓ Helpful in gathering opinions on priorities and needs simultaneously from a group of individuals
- ✓ Group sessions can be held in-person or virtually
- ✓ Workshop & Focus Group Dos:
    - Encourage group collaboration and discussion
    - Determine points of interest within group
    - Decide on level of priority of each interest (discussion or voting)
    - Identify and address outlying perspectives

General Considerations

- It is important to consider whether specialized outreach might be warranted or whether you can engage intermediaries to gain reliable information about the needs of special audiences.
- Gather information from multiple sources and combining information from multiple approaches can give a synoptic view of the broader need.
- Consider what level of depth and expertise will be shared through the webinar – is the focus on awareness building, increased access to data/tools, or enhanced used of data/tools? Tailor your needs assessment towards this focus.
- Consistency in questions used through each approach is best for accurate needs assessment.

- Allow enough time to effectively conduct a needs assessment, collect and analyze responses, and incorporate the responses into your webinar development.
- Consider what resources and tools/programs are available to you to conduct the needs assessment (e.g. online survey tools, videoconferencing, virtual white boards, etc.).
- Choose the best method for collecting data: consider factors that play a role in choosing the best method of data collection from your target audience – resources available, people and sectors involved, timeline, cost, and geographical location.
- Be realistic about your resources, capabilities, and timeline.
- Look at details and the bigger picture when analyzing results: when reviewing the data you've collected, look at both the specifics of what the responses share and the higher cross-cutting themes that connect the responses.
- Evaluation can be time consuming and the most valuable information can be identified by a professional evaluator. If funding is available, consider employing an on-staff evaluator.
- Enlist help and get feedback along the way: WGCapD can assist with the review of your needs assessment plan and your analysis of inputs.

Resources

- SERVIR Service Planning Toolkit – Consulation & Needs Assessment Tool: https://servirglobal.net/LinkClick.aspx?fileticket=CrJnRpnvoEU%3D&portalid=0
- NASA High-End Computing Needs Assessment: https://hec.nasa.gov/workshop20/workshop20.html