

Meeting Brief

Data-driven Subnational Decision-making in the Arctic

Scoping Workshop, 8 June 2022, online

workshop organizers and authors of the current meeting brief:

Pavel Tkach and Adam Stepien, Arctic Centre of the University of Lapland

the workshop was a part of:

[Arctic PASSION](#) (Pan-Arctic Observing System of Systems: Implementing Observations for Societal Needs), a Horizon 2020 project funded by the European Union

The workshop

The University of Lapland team working on the Arctic PASSION project organized an exclusive (invitation only) online Scoping Workshop on "Data-driven subnational decision-making in the Arctic". The meeting brought together scientists, experts and local, regional and national decision-makers. 33 persons registered for the workshop, 18 of whom were women. Including the organizers, there were 26 unique participants at the event, although some persons participated only in parts of the meeting.

One of the objectives of the Arctic PASSION is interaction with local and regional decision-makers, and the workshop constituted part of this process. The workshop aimed to identify key issues linking the pan-Arctic observation system (and the Arctic PASSION work specifically) with the needs and responsibilities of subnational authorities and agencies. In addition to the workshop, this scoping process included the review of outputs of earlier projects dedicated to strengthening pan-Arctic observation systems, traditional knowledge and community-based observation, as well as a series of interviews with decision-makers from across the circumpolar Arctic. These efforts were summarized in a policy brief that served as [a background paper](#) for the workshop. The paper includes preliminary identification of data channels that decision-makers might use for data-driven decision-making, data and knowledge gaps, and good and bad practices of using traditional knowledge in sub-national decision-making.

The issues identified in the scoping process will become topics for analysis and consecutive policy briefs, which will be elaborated on in the coming three years. Ideally, this future work will ultimately contribute to rendering Arctic PASSION outputs increasingly relevant for regional and local decision-making in the Arctic. The organizers were interested both in learning about decision-makers' needs and possible benefits from improved pan-Arctic observation and in learning about Arctic PASSION experts' needs and expected outcomes from communication with sub-national decision-makers for their work.

The workshop started with the presentation of the Arctic PASSION project and a short discussion on the current gaps and needs, and then proceeded to two broad themes: the use of community-based observation and traditional knowledge in subnational decision-making, and the challenges related to data readability for all stakeholders and rightsholders. The meeting concluded with the discussion on scoping topics for further work. [The final programme of the workshop](#) can be found online.

All slide presentations shared during the workshop can be found in the Nextcloud repository of the Arctic PASSION project.



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Overview of the Arctic PASSION project

The workshop was opened by the Director of the Arctic Centre of the University of Lapland, **Johanna Ikävalko**. She outlined the relevance of the work with local and regional decision-makers for the Arctic Centre and the challenges posed to the circumpolar-by-nature projects such as the Arctic PASSION resulting from the Russian invasion on Ukraine.

Michael Karcher (AWI, Arctic PASSION Project Leader), **Volker Rachold** (AWI, WP7 Leader, Supporting coherent decision-making), and **Øystein Godøy** (MET Norway, WP2 Leader, Bringing the Arctic Data System to Action) introduced the [Arctic PASSION project](#).

During the discussion closing the session, participants highlighted that it is essential to create systems and services that allow ease of data use for many categories of stakeholders, not only targeted professional users. That is why it is crucial to understand who the users are, how they use the data and what formats are appropriate. It was also stressed that data important for the Arctic tend not to be the primary focus of national or global systems (e.g. snow cover or permafrost, and resolution appropriate for decision-making), as these are issues specific for high latitudes. The work on Shared Arctic Variables can be a part of the solution. The key issue is communication between data users and data producers. It is important to distinguish between observation of the current state of the Arctic and the capability to predict. For the latter, there may be various reasons for deficiencies and limitations: in some areas, it is not possible to provide any greater certainty, for others, it may be a matter of time, work and resources in order to arrive at better models based on more complete observation sets.

Community-based observation in subnational decision-making

Discussion 1 was dedicated to the value of community-based observation, culture and traditional knowledge in data-driven policymaking at the subnational level. The presentation of **Nelly Bouevitch** – adaptation manager at the Government of Yukon - demonstrated good practices of bringing culture and traditional knowledge into policymaking. She paid attention to engagement with local indigenous communities in developing Yukon Climate Risk Assessment. The presentation was followed by a Q&A section, in which participants inquired about potential barriers to intensifying engagement with indigenous communities for policies and for elaborating reports, as well as ways of identifying and eliminating misunderstandings in engagement and alternative approaches in risk assessment.

The Arctic PASSION expert **Tero Mustonen** presented an Arctic PASSION pilot service 'Event Database of CBM Using Oral Histories, IK and LK', a service relevant for further improving and expanding the use of traditional knowledge and culture in Arctic policymaking.

Data readability and making information understandable for everyone

Discussion 2 was dedicated to the challenge of data readability and the question of making data and science communication understandable for everyone. The presentation by **Rick Thoman** – Climate Investigator at Alaska Centre for Climate Assessment and Policy/International Arctic Research Centre, and **Heather McFarland** – Science Communications Lead at the International Arctic Research Centre - demonstrated approaches to climate and environmental science communications in Alaska. In their presentation, experts emphasized the importance of the initial identification of critical concerns of audiences and focusing on the most important findings or messages in communicating research results to people. The role



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of translators of scientific data into understandable and practically useful information for subsequent use by decision-makers, particularly in small Arctic municipalities, was taken up particularly strongly in the proceeding Q&A.

The Arctic PASSION experts **Vito Vitale** and **Srdan Dobricic** presented pilot services working closely with large amounts of complex data - 'Integrated Fire Risk Management (INFRA)' service and 'Local Atmospheric Pollution Forecast' Service.

Scoping for future agenda

The workshop concluded with the discussion on the identification of focal topics for the future work of the Arctic PASSION related to subnational decision-making.

Participants stressed the importance of bridging institutions and experts, knowledge translators and disseminators for turning better information into better decision-making. There is already a lot of information in some areas, but it does not necessarily lead to desired change and action. It is also vital to reach different stakeholders. Therefore, for Arctic subnational decision-making, a crucial role is often played by national services and databases, as well as by private businesses and consulting companies that perform information translation and processing services for local and regional authorities and agencies. If the improved data systems and services are to influence better Arctic subnational decision-making, these target groups' characteristics and needs must be carefully considered.

The need to have a better understanding of the jurisdictional division of responsibilities for decisions and actions to which data services are to contribute was emphasized. For Arctic PASSION researchers, that is especially important in the North American context. Such a mapping of responsibility distribution in areas relevant to Arctic PASSION pilot services could be one of the outputs of the WP7. Such information – especially with regard to subnational governance level - could prove valuable for data providers and service developers. One future opportunity would also be to include metadata on the jurisdictional responsibilities for relevant decisions and actions in geolocated datasets.

The next step following the workshop is to define the topics for further work, draft policy briefs on these topics – a process supported by interviews with decision-makers and researchers, and identify recommendations via a co-production process during the final workshop organized in 2024. The team will also interact with the EU Polar Cluster in order to capture relevant insights from other Arctic projects.

Following the workshop and the Arctic PASSION General Assembly discussions (27-30.06.2022, where among others, the importance of presenting best practices was highlighted), the following topics have been provisionally chosen as areas of focus:

- What are the best practices for making data accessible and useful at the subnational level of Arctic governance?
- Mapping the distribution of governance responsibilities within areas relevant to chosen Arctic PASSION pilot services.
- Defining data needs for planning green transition at the subnational level in the Arctic.
- The overview of the movement of data generated at the local and regional level (including traditional knowledge and community-based observation). Where does the information end up, is it accessible and reusable, and is it uploaded or linked to national or international databases and services? Are there any good practices that can be showcased?
- The role of knowledge translation/bridging organizations in the data use by local and regional decision-makers (including national services and private consulting).
- Practices of de-jure and de-facto integration of traditional and indigenous knowledge to sub-national data-driven decision-making.



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