

Supporting activities in the "Arctic Challenge for Sustainability (ArCS)" program

Tetsuo Sueyoshi¹ and Masao Fukasawa²

¹National Institute of Polar Research (NIPR)

²Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

This presentation tries to introduce how the Japanese five-year Arctic research program "Arctic Challenge for Sustainability (ArCS)" was implemented and managed, focusing on the role of the program office and the program coordinator. "Arctic Challenge for Sustainability (ArCS)" is a Japanese five-year program for the Arctic research, which was conducted during 2015-2020. Following on from its predecessor Green Network of Excellence Arctic Climate Change Research Project (GRENE-Arctic, 2011–2015), ArCS started as the second national Arctic research project in 2015 with a half-year overlap with GRENE-Arctic. It intended to keep the momentum of Japan's Arctic research and to expand the research community, integrating humanities and social sciences, while the project goal also included showing visible contributions to the domestic and international stakeholders, mainly by delivering up-to-date scientific results. For this purpose, ArCS included several supportive activities to expand research capabilities and enhance Japan's international presence in the Arctic community, in addition to the promotion of individual research topics.

As a national project, ArCS has the aspect of strengthening Japanese Arctic research. For this purpose, several supporting activities were included in addition to the research itself. There are programs for establishing research and observation platforms and sending young researchers to overseas institutions. It was also required for ArCS to deliver research results to multiple stakeholders, both international and domestic. There are enhancements in outreach activities targeting the general public and the international Arctic research community.

The whole structure of the project is illustrated in Figure 1. Under the first pillar, there are six research themes in the natural sciences, one research theme is in the humanities and social sciences, and another research theme is in data management and sharing. Including the humanities and social sciences is a major feature of the ArCS project, which was thus far very rare in state-led scientific research projects. The setup of the theme dealing with project data was also a key development, being aware of the growing importance of data management and open data. Under the second pillar, there is "maintain and develop platforms for research in the Arctic region" menu, which aims to expand the geographical coverage and promote international collaboration. Under the third pillar, there are two menus for overseas dispatch, one for early career researchers and practitioners, and another for experienced scientists. The former is for attending meetings or visiting institutions for research, while the latter is for the contribution to the experts' meetings such as AC working groups. Chapter three describes more on activities under the second and third pillars, as well as the outreach activities of the project.

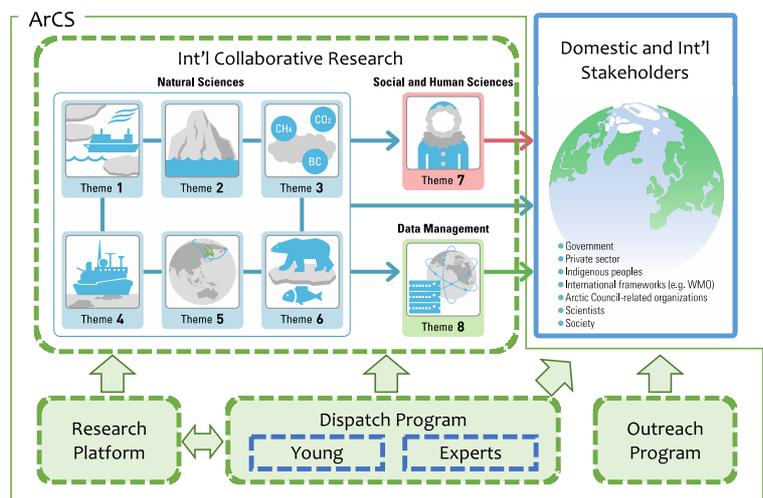


Figure 1. Structure and target of ArCS program.

References

Sueyoshi, T., M. Fukasawa, H. Enomoto, S. Saito, and T. Kikuchi: Background and activities of the "Arctic Challenge for Sustainability" program, *Polar Science*, submitted.