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THE SVALBARD INTEGRATED ARCTIC EARTH OBSERVING SYSTEM (SIOS); IMPLEMENTATION AND MAIN ASSETS OF THE SIOS KNOWLEDGE CENTRE

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The Svalbard Integrated Arctic Earth Observing System (SIOS) is a distributed research infrastructure. Building on a network of existing infrastructures owned individually by the Members, SIOS will coordinate a state-of-the-art research infrastructure (RI) and observing capacity in the Svalbard region in order to foster excellent environmental and climate change research. SIOS aims at establishing an integrated regional observational system for long term acquisition and proliferation of fundamental knowledge on global environmental change within an Earth System Science (ESS) perspective, in and around Svalbard. This includes systematic development and implementation of methods for how observational networks are to be designed and implemented in Arctic environments.

The SIOS Knowledge Centre shall provide services and coordinate activities among researchers operating in and around Svalbard. The services will provide added value for researchers, research funders and decision makers by ensuring:

- open access to research infrastructure and observational capacities
- effective data management, based on open access to metadata and physical datasets
- better use of remote sensing data and validation of such using on-site observations
- logistic coordination with access to necessary equipment and workshops/labs, safety courses, information about research sailing routes and fieldwork operations etc.
- training programs and courses for better use of the research infrastructure
- scientific integration and optimisation of the observing system by organising scientific workshops, developing strategies for infrastructure development and use, and sharing knowledge in the field by effective and informative outreach to scientists and the public.

SIOS is an ESFRI roadmap project of high strategic interest (European Strategy Forum on Research Infrastructure). The Preparatory Phase (2010-2014) is funded by the European Commission¹. The presentation provides the current state of play, a description of the main assets of SIOS and the organization of the 3 year Implementation Phase (2015-2017) expected to be launched in November 2014.

¹ SIOS Preparatory Phase Project, European Commission (FP7), Contract 261747.