

Agenda Item 7

AMAP WG31/7/Info-2

Reykjavik, Iceland, 12-14 September 2017

# Impact Assessment on a Long-Term Investment on Arctic Observations (IMOBAR)

### Presented by the European Commission

12 September 2017

### Background

The IMOBAR project is an assessment of the benefits of Arctic observations, compared to investment and management costs. It provides the elements to build the "business case" for sustaining in the long-term Arctic observations.

The study builds on existing initiatives and studies aiming at identifying key Arctic change variables and research or operational activities. In particular, IMOBAR leverages the relevant 7<sup>th</sup> Framework Programme and Horizon 2020 projects as well as major other initiative such as the *International Arctic Observations Assessment Framework* by the *IDA Science and Technology Policy Institute (STPI)* and the *Sustaining Arctic Observing Networks (SAON )*. See also WG31-4-Info2.

IMOBAR is made in collaboration between the Joint Research Centre (JRC) and Directorate General for Research and Innovation (DG RTD).

**Requests to WG** For information.



EUROPEAN COMMISSION DIRECTORATE-GENERAL JOINT RESEARCH CENTRE Directorate C - Energy, Transport and Climate (Petten/Ispra/Sevilla) Air & Climate

DIRECTORATE-GENERAL RESEARCH AND INNOVATION Directorate I - Climate Action and Resource Efficiency (Brussels) Climate Action and Earth Observation

### IMOBAR

## IMPACT ASSESSMENT ON A LONG-TERM INVESTMENT ON ARCTIC OBSERVATIONS

#### Introduction

Building on previous initiatives the European Commission and High Representative of the Union for Foreign Affairs and Security Policy wrote the Joint Communication to the European Parliament and the Council on An Integrated EU Policy for the Arctic. The communication identifies three priority areas: climate change and safeguarding the Arctic environment, sustainable development in and around the Arctic, and international cooperation on Arctic issues.

Research, science and innovation are especially important for tackling priority areas. During the last decades Arctic observation and monitoring programmes and EU research projects were devoted to the better understanding of the Arctic environment. On the other hand, due to the complex interactions and difficulties in observing remote areas, the full understanding of the Arctic system and its interaction with the global climate are still largely unknown.

In order to respond to these challenges it is necessary to sustain a long term observing system monitoring climate and environmental change in the Arctic. Large investments for sustaining an Arctic observing system should be justified by stakeholder needs and costs of investments should be compared with societal benefits arising from the provision of environmental observations.

The IMOBAR project addresses these challenges through a system analysis and the assessment of benefits and co-benefits of Arctic observations, compared to investment and management costs. It provides the elements to build the "business case" for sustaining in the long-term Arctic observations and, accordingly, to support the decision making process.

IMOBAR is made in collaboration between the Joint Research Centre (JRC) and Directorate General for Research and Innovation (DG RTD). It also involves external expertise in estimating the societal benefits from observing systems.

The study builds on existing initiatives and studies aiming at identifying key Arctic change variables and research or operational activities. In particular, IMOBAR leverages the relevant 7<sup>th</sup> Framework Programme and Horizon 2020 projects as well as major international initiative such as the ones carried out by the Sustained Arctic Observing Network (SAON). The evaluation will start from the value tree framework methodology, proposed by the Science and Technology Policy Institute, that links in a structured way the assessment and evaluation of the qualitative benefits across a set of Arctic Societal Benefit Areas deriving from specific observational data streams and systems.

The results of the impact assessment study will be published and presented to the next Arctic Science Ministerial that is planned for the autumn 2018. The report will promote and justify ongoing and future investments in observational systems in the Arctic.

### Goal

The goal of IMOBAR is to provide to policy makers the elements for supporting the long term investments in the Arctic observing systems and, in this way, supporting the decision making process. This will be achieved by evaluating costs and societal benefits from the Arctic observing systems.

### Structure

The project consists of four tasks:

- Collecting existing information on satellite and in-situ observations, key variables, evaluation methodologies and present costs;
- Organizing workshops with stakeholders and experts in order to provide information on observational needs;
- Performing an impact analysis of emerging sectors;
- Producing a report on Arctic observational systems in order to present it at the next Arctic Science Ministerial.

### Timeline

The project started in July 2017 and will end in June 2018. The four tasks will be performed sequentially with interim reports at the end of each task and the main report at the end of the project.



The first three months of the project are dedicated to the collection of existing information. In the following three months there will be a stakeholder meeting producing information on observing system recommendations and user needs. After nine months the project will be produce the analysis of societal impacts from observational systems. One year after the start of the project a reviewed report describing the study and its findings will be prepared.