

Agreement of understanding Data, products, and publications.

The SEATRACK programme aims to map the winter distribution of selected seabird species in the North Atlantic and understand how changes in environmental conditions and human activities affect their demography and population trajectories. The programme was initiated in 2014 and has been organized in three phases (Phase I 2014-2018, Phase II 2019-2022 and Phase III 2023-2026).

SEATRACK is led by a project group with representatives from the Norwegian Polar Institute (NPI) and the Norwegian Institute for Nature Research (NINA, see appendix). SEATRACK has a small project staff consisting of the project leader, the project technicians & engineers as well as a varying number of PhD-students and post-doctoral fellows. Scientists taking part in the programme are regarded as Partners (see appendix). SEATRACK supports Partners by providing tracking devices and necessary equipment. It processes, stores, and distributes the data and makes data products available in web applications. SEATRACK may in some instances contribute to field costs.

SEATRACK's funders are the Norwegian Government and Offshore Norge along with several energy companies (see appendix). However, SEATRACK is only made possible thanks to significant contributions from all Partners in terms of funding for their field work and work time.

SEATRACK has a strong research component informed by a science plan and focusing on the production of scientific knowledge. The broad geographical and temporal coverage of the programme allows exploration of varied research topics, including, but not limited to, spatial distribution and habitat use, population dynamics, and assessments of conflicts with human activities. SEATRACK will help coordinate the formation of research networks within the group of Partners.

A network of early career-researchers (ECRs) has been established at the start of phase III ("SEATRACK Fledglings"). The main goal of the group is to offer opportunities to students and ECRs to collaborate on various topics revolving around the use, processing, and analysis of SEATRACK data. The group has a separate channel for communications that is not open to all Partners, and at least one member of the SEATRACK project group sits on the steering committee to ensure good communication and coordination.

Data management

All data downloaded from archival loggers (e.g., light-level geolocators and GPS loggers) or transmitters (GPS-GSM or Argos tags) are sent to SEATRACK together with relevant metadata (logger-information, bird status, morphometrics, breeding status, etc.). These data are processed and analysed by the SEATRACK staff and stored in a database. The data collected are the shared property of SEATRACK and the Partner, and the data will be tagged with the name of the Partner as "Data responsible" (see appendix).

Data that were not originally collected as part of SEATRACK can be processed and included in the database upon request by persons owning these data. The name of the data owner will be listed as "Data responsible" in the database. By doing so, ownership of the data will be shared with SEATRACK, and data may be accessed by other users as outlined in this agreement.

Scientific publications, co-authorship, and acknowledgement

The scientific work within SEATRACK is based on a science plan. We strongly encourage Partners to take an active role in the network and suggest joint publications. Participation in SEATRACK does not preclude participants from publishing their own data collected through SEATRACK. Plans for scientific publications

must, however, be clearly communicated, and the use of data of other Data Owners must be agreed upon by Partners and Data owners. As such, SEATRACK has a coordinating role concerning publication plans. This is implemented using the Data request procedure and the overview of ongoing work (<https://seatrack.net/data/>). SEATRACK facilitates interaction and communication among participants by organizing workshops and meetings. E-mail will, however, be the main communication channel.

SEATRACK advocates a policy that offers authorship following the recommendations put forward by the International Committee of Medical Journal Editors (ICMJE, see appendix). Using these criteria SEATRACK puts forward the following roadmap for co-authorship:

- A. *Invitation*: Lead authors invite all relevant Partners and Data Owners (ICMJE criteria 1) and explain the 4 ICMJE authorship criteria. Recipients must confirm their participation within a set deadline (suggested: 2 months) to be considered as co-authors.
- B. *Participation*: Those accepting the invitation should actively participate in the writing and/or reviewing process (ICMJE criteria 2), responding to lead authors, and providing feedback.
- C. *Final Approval*: The final draft is shared for approval with all co-authors (ICMJE criteria 3 & 4), who must confirm their approval by a set deadline (suggested: 1 month).

Possible co-authors include, but are not limited to, Partners (including co-Partners) and Data owners of pre-SEATRACK data registered for each species and locality. In addition, Partners should inform lead authors about any additional relevant contributors who meet ICMJE criteria 1.

Invited co-authors, Partners and contributors who meet fewer than all 4 ICMJE criteria for authorship should not be listed as authors, but they should be acknowledged and/or cited, following ICMJE guidelines.

When reviewing data requests, Data owners and Partners must consider that journals will require data to be made publicly available.

All publications utilizing SEATRACK data or based on SEATRACK equipment (e.g. left-over loggers) must refer to SEATRACK in the acknowledgements.

Data accessibility for Funders

Funders and their subcontractors may access data without using the data request procedure to perform environmental risk assessments and use the information produced by SEATRACK for their management tasks. Beside Partners and Data owners, Funders will have access to unprocessed or processed data.

Core data products

SEATRACK is maintaining a range of core data products. These include the processed dataset, the seasonal kernel density dataset, the informed random movement algorithm (IRMA) dataset, and the monthly North Atlantic population map (NAS) map dataset. Partners and Data Owners can access these data products using the data request procedure (<https://seatrack.net/data/>). They agree that SEATRACK updates and maintains these data products without requiring data requests.

Web presence and map products

SEATRACK provides, on its website (<https://seatrack.net>), general information, including an updated list of current Partners and Funders, important documentation such as this agreement as well as tools to explore the programme's metadata. Examples of map products include kernel densities showing seasonal distributions of breeding populations and species (diversityapp.seatrack.net), and population maps predicting the densities of birds from a given species, colony, and month across the North Atlantic (abundanceapp.seatrack.net).

Appendix

ICMJE authorship recommendations

The 4 co-authorship criteria put forward by the International Committee of Medical Journal Editors ([ICMJE](#)) are:

1. Substantial contributions to the conception or design of the work; *OR* the acquisition, analysis, *OR* interpretation of data for the work; *AND*
2. Drafting the work or reviewing it critically for important intellectual content; *AND*
3. Final approval of the version to be published; *AND*
4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Definitions

Partner A person that manages the coordination of field work for a SEATRACK species at a SEATRACK site. They are responsible for the correspondence with SEATRACK, deployment and retrieval of loggers and transmitters, and submitting data and metadata in a timely fashion. All Partners are listed here: <https://seatrack.net/about/partners/>. Some sites and species combinations may have two Partners (termed co-Partners).

Funder SEATRACK phase III is funded by the Norwegian Government (*Norwegian Environmental Agency, Norwegian Water Resources and Energy Directorate, Ministry of Climate and Environment, Ministry of Energy, and Norwegian Coastal Administration*) and Offshore Norge along with several energy companies. All funders are listed here: <https://seatrack.net/about/funding/>.

Project Group This group coordinates SEATRACK and is composed of the SEATRACK staff and representatives from NPI and NINA (<https://seatrack.net/about/project-group/>).

Data responsible A person that co-owns data in the SEATRACK database. These can include data not originally collected as part of SEATRACK (also termed pre-SEATRACK or historic data). All Partners are Data responsible.

Co-author A person fulfilling all 4 ICMJE criteria.