# A Researchers Guide to Ny-Ålesund v1.2, 30<sup>th</sup> December 2019

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# Welcome to Ny-Ålesund!

This guide is intended to help researchers that are planning to go to Ny-Ålesund from the first development of a project, to booking of the stay and preparing for field work, to the actual work on site, and the follow-up after.

# 1 PART I: Planning a research project at the Ny-Ålesund Research Station

Ny-Ålesund is the world's northernmost year-round research stations and an important Norwegian platform for international research that has been in operation for more than 50 years. The station's High Arctic location, far from pollution sources, and proximal to a branch of the North Atlantic current that carries warm Atlantic Water northward toward the Arctic Ocean, makes Ny-Ålesund ideal for Arctic research and monitoring of environmental change.

The Arctic is warming twice as fast as the rest of the globe, and the Svalbard region is warming fastest within the Arctic. Research and environmental observations in Ny-Ålesund play important roles in a number of national and international monitoring programmes. It is a key spot for observing the effects of the warming that is occurring and for conducting research aimed at understanding how such changes influence the region and the globe. Ny-Ålesund is relatively easily accessible, with an airport and a harbour and it has a well developed infrastructure (laboratories and observatories) available to researchers.

International research activity and cooperation is extensive in Ny-Ålesund. Over 20 research institutions have long-term research and monitoring activities that operate out of Ny-Ålesund. The Norwegian Polar Institute (NPI) has been assigned the role of being Norway's host at the Ny-Ålesund Research Station. NPI is responsible for implementation and daily follow-up of the research strategy on-site, as well as serving as the point of contact for national and international research activities. The company Kings Bay AS owns the land and most of the buildings in Ny-Ålesund, and provides infrastructure support services for research activity in the area.

# 1.1 Research Framework

The Norwegian Gouverment published the <u>Strategy for research and higher education in Svalbard</u> in May 2018. In order to ensure sound frameworks for academic development and coordination of activities, the Government has asked the Research Council to develop a Ny-Ålesund research strategy. The research strategy has been developed in close collaboration with all actors conducting research in Ny-Ålesund and NySMAC. The strategy was released in May 2019 and can be found <u>here</u>.

# 1.2 Ny-Ålesund Research Flagship Programmes

The research in Ny-Ålesund is carried out within the framework of various institutional, national and international programmes. Substantial portions of these activities are related and complementary. To release the full potential of these complementarities, four thematically broad Flagship Programmes for Ny-Ålesund have been established, which combined constitute most of the research and monitoring that occurs in Ny-Ålesund:

- Atmosphere
- Terrestrial ecosystems
- Kongsfjord system
- Glaciology

The Flagship Programmes are networks bringing together scientists working in Ny-Ålesund, and they aim to enhance holistic approaches for earth system science understanding through long-term observations, process understanding and modelling. Researchers participating in the flagships are encouraged to meet to present results, and discuss the future development of the flagships. The flagship meetings are open for all, at no costs. The flagship web pages provide background information about the research in the fields covered by the flagships (including a gap analysis), information on active working groups with contact persons, and information on future activities. The flagships also work on making available information on measured long-term variables, and keeps email list of researchers active in the field. Currently the best overview of measured parameters within each domain is the parameter list at each flagships webpage. SIOS is currently working on an Observation Facility Database, which includes information of instruments and variables available in Svalbard, and the flagships will work with SIOS to develop this database.

Researchers planning new projects in Ny-Ålesund are strongly encouraged to familiarise themselves with already ongoing research and monitoring, and attend the flagship meetings.

# 1.3 Institutions present in Ny-Ålesund

As described above, more than 20 institutions run long term projects and programmes in Ny-Ålesund. Ten of these institutions have key functions, in that they have long-term rental agreements with Kings Bay, and assess and accept projects initiated by researchers from their respective country, planning activity in Ny-Ålesund. Institutions from different countries have different procedures for assessment and approval of projects. Please follow the links and instructions below for your country:

- Norway: Norwegian Polar Institute (NPI): <u>Ny-Ålesund Research Station Sverdrup</u>. Contact person: HeadNPI.NyA@npolar.no
- China: Chinese Arctic and Antarctic Administration (CAA): <u>Chinese Arctic Yellow River Station</u>. Contact person: <u>yellowriver@pric.org.cn</u>
- Germany and France: Alfred Wegener Institute (AWI) and Institut Polaire Francais, Paul Emile Victor (IPEV): <u>AWIPEV – Arctic Research Base Ny-Ålesund</u>. Contact person: stationleader@awipev.eu
- India: National Centre for Polar and Ocean Research (NCPOR): <u>Himadri Station</u>. Contact person: <u>stationleader.india@gmail.com</u>
- Italy: Consiglio Nazionale delle Ricerche (CNR): <u>Arctic Station Dirigibile Italia</u>. Contact person: stationleader.arctic@cnr.it
- Japan: National Institute of Polar Research (NIPR): <u>Ny-Ålesund Research Station</u>. Contact person: <u>nalyr@nipr.ac.jp</u>
- Republic of Korea: Korea Polar Research Institute (KOPRI): <u>Arctic Dasan Station</u>. Contact person: <u>dasan@kopri.re.kr</u>
- The Netherlands: University of Groningen (UoG): <u>Arctic Centre</u>. Contact person: poolstation.nl@gmail.com (m.j.j.e.loonen@rug.nl)
- UK: Natural Environment Research Council (NERC): <u>UK Arctic Research Station</u>. Contact person: <u>nc@bas.ac.uk</u>

Researchers from countries not listed here should follow the procedures given by the Norwegian Polar Institute and Ny-Ålesund Research Station - Sverdrup

In some countries, the funding and the access are linked, but for some (like Norway), access is provided to already funded projects. The different countries also have different application deadlines.

# 1.4 Access programmes

There are currently (at least) two programmes open for all, that provides access (free of cost) to the different institutions including in Ny-Ålesund Research Station. These are the <a href="INTERACT">INTERACT</a>
<a href=

# 2 PART II: Preparing for your field work in Ny-Ålesund

When your idea is matured into a (funded) research project, it is time for you to prepare for tyour field work in Ny-Ålesund.

The <u>Guide for Scientists</u>, developed by the <u>Governor of Svalbard</u>, is a checklist for research planning in Svalbard. Many research activities in Ny-Ålesund need permission from the Governor of Svalbard and the checklist will help you find out what you have to do before fieldwork, what kind of permissions you may need and where to send an application.

The <u>Svalbard Science Forum Guide for Research Planning</u> also contains information regarding fieldwork, logistics and safety in Svalbard.

# 2.1 Book your stay in Ny-Ålesund through the RiS portal

Depending on your host institution in Ny-Ålesund, you may have to book your project in Ny-Ålesund in the Research in Svalbard (RIS) data portal yourself or the host institution will do this for you. RIS is a combined system including registration of new projects, or update of existing projects, booking of facilities in Ny-Ålesund, and application for permits from the Governor of Svalbard (if relevant for you project). Before you book, please read the Help and FAQ pages from RiS, and check out the new "How to" presentations (link in the right side panel).

Additional information about RiS booking is also available in the <u>Guide for application/bookings at Sverdrup</u>.

#### Define your RiS project

If your project has not been registered in the RiS system before, you will need to register it as a new project. The new project should include a fieldwork period and a host institution in Ny-Ålesund (see below). Any new project will have to be approved by Svalbard Science Forum (SSF) before being issued a RiS ID number. This is done only during working hours. When the project is approved, a new click button will be available on you project page in the RIS portal, allowing you to do the booking to Ny-Ålesund.

If your project has already been registered in the RiS portal, please verify and update the project information. You will find your active projects under "MY PROJECTS" on the front page when you log in. You can search the SSF database for your RiS number, name or project title if you do not have a record of it.

#### New persons in RiS

New participants in a project must also be registered in RiS. It is easiest if a new person to RiS add her-/himself to the database (to step with registration and conformation). Then the new participant can be searched for and added to the project by the project leader.

Fieldwork period

In order to submit a booking to Ny-Ålesund you need to define a fieldwork period ahead in time for your project. The fieldwork period starts on the date of arrival in Ny-Ålesund by the first individual in the field team, and ends on the date of departure of the last individual in the field team. Please note that the field work period is not equal to the project period. Note also that all dates in the booking must be within your fieldwork period, except if you need to book freezer/ storage space. If you need to enter a second fieldwork period, you must never "reuse" an old fieldwork period by changing the dates, as this will "mess up" the statistics and search possibilities within RiS! Remember to add exact fieldwork location(s) in order to utilize the Awareness module in RiS (the turquoise cooperation-box on your project page).

#### Host institution

Your fieldwork period needs to be affiliated with a host institution within the Ny-Ålesund Research Station in order to submit a booking to Ny-Ålesund. To do this, choose *Edit project*, go to *Register Fieldwork Period*, and click on the location or enter the desired location in the field above the map. Add your host institution (listed under station) to your fieldwork period.

#### **Flights**

If there are several people in the team arriving and departing at different times, choose the *Add new Flight* key to add individual flight details for each person. Your ticket includes 20 kg luggage, including hand luggage. Extra luggage and cargo can be brought on the plane if there's room. There will be an additional cost for this. There is no guarantee that you will be able to bring more than 20 kg, even if you have requested excessive weight in RIS or through Kings Bay Reception. For Cargi shipping see below.

In the transport section of the booking you can check the flight schedule and seat availability for each flight. Please check the flight and seat availability before submitting your booking. This will save both you and Kings Bay time. However, there might be bookings waiting in the system for that same flight, so there's no guarantee that you get a seat until you have received a confirmation from Kings Bay.

#### Lodging

Please specify lodging any dietary needs (including vegetarian). More information and images of the available accommodation is given <a href="here">here</a>.

## Field equipment

In the RiS booking you should specify the need for large equipment like snowmobiles, boats, etc. Acceptance of the project may depend on the equipment needs.

If you need to rent other type of equipment (clothes, safety equipment, etc.) from NPI Sverdrup, this needs to be done on a separate form. The list of available equipment can be found <a href="here">here</a>. Send request for equipment to <a href="materialforvalter@npolar.no">materialforvalter@npolar.no</a> at the same time as you submit your booking. Please note that other host institutions may have different procedures. Please check this directly with your host institution.

#### Lab facilities

Common research infrastructures like the Marine lab, the boat *Teisten*, and wet and dry lab facilities (including chemicals needed) should be booked through RiS.

# Safety course and weapons

You sign up for the Kings Bay safety course and for rental of a firearm when you submit your booking in RiS. Please note that if NPI is your host institution (and you are member of an NPI project), you book a rifle directly through NPI (and an email to materialforvalter), not through RiS.

#### Invoice address

Please make sure to include a complete address and a correct reference number for electronic invoicing. Lack of proper invoice information will create a lot of extra work for Kings Bay. You can also pay your expenses with credit card when checking out from Kings Bay.

#### RiS workflow

Once you submit your booking in RiS it first goes to the institution hosting your project for approval. After the project is approved by the host institution it goes to Kings Bay for additional infrastructure approval (flight, accommodation, labs, etc). This two step procedure might take some time. Once your project is accepted from both parties, you will receive an email with confirmation of your flight from Longyearbyen to Ny-Ålesund, lodging, and other information from Kings Bay.

## Requesting changes in RiS

Changes to a booking must be done through the existing RiS booking ID number that your project has been issued. You should <u>not</u> establish a new booking to request e.g. new flight times. You will not be able to modify a booking while it is waiting for approval, so please be patient and wait until your booking has been approved before you attempt to modify it.

Please double check your bookings in detail and make sure they are correct. Errors in a booking such as the number of participants, arrival and departure dates etc. that have not been corrected before arrival in Ny-Ålesund will be fully charged.

#### **Problems**

Please contact SSF at <a href="mailto:ssf@rcn.no">ssf@rcn.no</a> if you experience problems when making changes to an existing RiS booking ID.

#### **Terms & Conditions**

Kings Bay's terms & conditions apply for all bookings to Ny-Ålesund and can be found here.

#### 2.2 Travel to Svalbard

Your travel to and from Longyearbyen will have to be booked separately, and not through RiS. Scandinavian Airlines (SAS) and Norwegian fly regular scheduled flights to Longyearbyen from Oslo and Tromsø. Both Oslo and Tromsø are inside the Schengen Area (as opposed to the Svalbard islands), which means that travelers from outside the Schengen Area may need a visa for transiting mainland Norway (both ways) even if a visa is not required for staying in Svalbard. All passengers must present their passports before boarding a flight to Svalbard.

# 2.3 Research permissions and applications

While some research activities in Svalbard do not require prior consent of a governmental agencies, others might be subject to the approval of several government agencies. Most of Norway's legislation applies to the Svalbard islands and regulates a number of research-relevant activities in the archipelago. Researchers and research institutions must familiarize themselves with applicable regulations and obtain all relevant permits from Norwegian authorities before initiating their research activities in Svalbard.

Svalbard-specific Norwegian legislation, notably <u>the Svalbard Environmental Protection Act</u> (2001) and regulations, is highly relevant to all field research in the archipelago. This act is stricter than similar acts on the Norwegian mainland and the main purpose is to protect the vulnerable

nature and cultural heritage in Svalbard. More often than not, field research will require an exemption from the environmental regulations and/or a permit from the Governor of Svalbard.

All permit applications must be sent directly from the researcher to the Governor of Svalbard through a module in the RiS portal. If you are in doubt as to whether you need a permit for your research or not, you can contact the Governor of Svalbard, or Kings Bay AS (within their area plan, see below) for clarification. For more information about activities that require the Governor's consent, see <a href="the Governor's guide to researchers in Svalbard">the Governor's guide to researchers in Svalbard</a>. For research activities within the landuse area plan for Ny-Ålesund, Kings Bay will have to approve and make the application on your behalf (see below).

# 2.3.1 Within the Ny-Ålesund land-use plan area

If your research activity requires installations, instruments or digging, or if it will impact the ground within the Ny-Ålesund <u>land-use area plan</u> in any way, the application process needs to go through Kings Bay who is the land-use authority in Ny-Ålesund. Kings Bay will assess your request and investigate possible areas of conflicts, or possible restrictions in the area of interest. Please note that instruments - if at all possible - should be placed within the designated instrument areas (see <u>map</u>). Instruments outside these areas may be more difficult to get approval for.

After assessing your application, Kings Bay will send an application to the Governor of Svalbard on your behalf. The processing time will be between 4 and 6 weeks, depending on the workload in Kings Bay and the Governor's office, so it is important to start the application process early.

To help speed up the process, the following information must be included in the request to Kings Bay:

- What (drawing, picture, size)
- Where (GPS position marked on a map, alternative positions)
- Why (a short and simple description of your project for an non-scientist to understand and a RiS number)
- How (what kind of foundation, drilling, electricity etc.)
- When (what time, and for how long)

The request should be sent to: <a href="mailto:advisor@kingsbay.no">advisor@kingsbay.no</a>. Kings Bay will inform you of the outcome of the Governor's application assessment.

The <u>Svalbard Science Forum Guide to Research Permissions</u> lists some of the other agencies that may be relevant to researchers and research institutions, depending on their planned activity in Svalbard.

# 2.3.2 Use of radio emitting equipment

Ny-Ålesund is a radio silent area, where the electromagnetic radiation activity should be kept at an absolute minimum. There are several scientific instruments in Ny-Ålesund that take advantage of the radio silence in Ny-Ålesund.

Use of wireless equipment within the frequency band 2-32 GHz - including Wi-Fi and Bluetooth - is on a general basis forbidden in Ny-Ålesund itself, and in the area inside a radius of 20 km from Ny-Ålesund. All visitors, including scientists, need to turn off Wi-Fi and Bluetooth on all devices such as mobile phones, laptops, Kindles, cameras, digital wrist watches etc. Such equipment can be used only with flight mode activated.

It is however possible to use transmitting radio frequency equipment in Ny-Ålesund for some scientific and safety reasons. Scientist wanting to use active transmitting radio frequency equipment

in Ny-Ålesund must - in addition to applying for a permit to do so from Nkom - inform, and coordinate with the rest of the science community in Ny-Ålesund. If you have no alternative and your science project depends on using these frequencies, please read the procedures listed <a href="here">here</a> very carefully. If you have any questions, please contact NPI Head in Ny-Ålesund.

# 2.3.3 Use of unmanned aerial vehicles (UAVs) and ballons in Ny-Ålesund

Kings Bay have developed guidelines for use of unmanned aerial vehicles (UAVs) in the Ny-Ålesund area. The guidelines include information about applications, permitted equipment, need for coordination etc, and can be found <a href="mailto:here">here</a>. The use of airspace must be done in dialogue and coordination with Kings Bay AFIS that can be contacted at <a href="mailto:airport@kingsbay.no">airport@kingsbay.no</a>. To fly a drone or balloon you must follow the procedures for RF emitting devices if used for the drone or balloon. Information about use of RF emitting equipment can be found in 2.3.2. You would also need an approval or at minimum notify the Norwegian Civil Aviation Authority for approval.

NORCE is operating the <u>Arctic Center for Unmanned Aircraft</u> (ASUF) at the airport in Ny-Ålesund. Questions may also be addressed there (Rune Storvold, <u>rust@norceresearch.no</u>).

# 2.4 Available common research facilities in Ny-Ålesund

Kings Bay owns several research facilities for common use in Ny-Ålesund. Most of these can be booked through the RIS portal. Below follows an overview of the commonly available research infrastructure, and their capacities and equipment.

# 2.4.1 Kings Bay Marine Laboratory

The Marine laboratory is a large and relatively new laboratory (opened in 2005) located on the waterfront, and it has laboratories, temperature controlled rooms and water tanks. It is perfect for work with marine systems, to test climate change scenarios and to conduct marine pollution research. The main focus the last few years has been on phytoplankton, algae, climate change, plastics, clams and fjord ecosystem work.

The Marine lab consists of three floors with a seminar room, laboratories, temperate rooms and water holding tanks. Complementary on-line information about the laboratory can be found <a href="here">here</a>. The webpage also include a pdf file showing confirmed bookings and hence available space (the file is updated weekly).

It is also possible to book chemicals for use in the lab.

#### 2.4.2 MS Teisten

MS *Teisten* is a small work boat 31 feet long and equipped to do smaller scientific operations and surveys in Kongsfjorden and Krossfjorden. Complementary online information can be found <a href="here">here</a>. The webpage also include a pdf file showing confirmed bookings and available space (the file is updated weekly).

#### 2.4.3 Vaskeri Lab

The Vaskeri Lab is an older building that consists of seven rooms. There are two common labs, in addition to a metrology and calibration lab. The two laboratory rooms can be used for environmental, terrestrial laboratory work, and is perfect for work with soil, sediments, animal sampling etc. The main focus the last few years has been on ornithology, soil, permafrost and meteorology. Complementary online information can be found <a href="here">here</a>.

#### 2.4.4 Gruvebadet

Gruvebadet is an atmosphere laboratory and observatory which is located between the centre of Ny-Ålesund and the Zeppelin observatory. Gruvebadet consists of five rooms for instruments, where 3 rooms have inlets from the roof. The rooms are furnished with desks for instruments. Today Gruvebadet has activities from CNR, NCPOR and NIPR. At the moment, the facility can not be booked through RiS, but you can contact <a href="mailto:research@kingsbay.no">research@kingsbay.no</a> with the request.

# 2.4.5 Zeppelin Observatory

The Zeppelin observatory is dedicated to atmospheric research and monitoring. It is located just south of Ny-Ålesund at 472 m.a.s.l. on the Zeppelin Mountain. Complementary online information about the observatory can be found <a href="https://example.com/here">here</a>. The main focus areas at the Observatory currently include i) research on long-transported atmospheric contaminants, ii) characteristics of the Arctic atmosphere and studies of atmospheric processes and changes, and iii) measurements aimed at increasing the understanding of feedbacks between aerosols, clouds and radiation, and how these affect the Arctic climate.

The observatory consists of six different rooms for instruments, three outdoor platforms for instruments and inlets, and a 14-meter tall mast for inlets. Two of the instrument rooms are earmarked for "campaign" instruments and reserved for project-based measurement campaigns. The rooms are furnished with desks and racks for instruments.

The Observatory is owned by NPI, while NILU have the scientific responsibility for the Observatory. All new activities in the observatory must be approved by the *Zeppelin Observatory House meeting* (which consists of NILU, NPI, and Stockholm University). If you have a request for use of the observatory please complete the <u>registration form</u> and submit your request to the Head of NPI in Ny-Ålesund at HeadNPI.NyA@npolar.no.

## 2.4.6 The Light Sensitive Cabin

The Light Sensitive Cabin is located 2,5 km from the centre of Ny-Ålesund, and accommodate four domes on the roof that can be used for instruments that are sensitive to light pollution from Ny-Ålesund. The cabin is insulated to keep the temperature inside above freezing. The main focus the last few years has been aurora and light measurements.

Currently the facility can not be booked through RiS, but you can contact <a href="mailto:research@kingsbay.no">research@kingsbay.no</a> with the request.

# 2.4.7 The Old Harbour

The old pier serves as an access point to the water, and the AWIPEV underwater observatory is located here.

# 2.4.8 Kings Bay Veksthus (the new terrestrial laboratory)

The new terrestrial laboratory, Veksthuset, is located in the middle of Ny-Ålesund and in addition to hosting NIPR, it includes brand new dry and semi-wet lab facilities. The labs are in the process of being furnished and equipped, and are expected to be ready for use from summer 2019. Currently the facility can not be booked through RiS, but you can contact <a href="mailto:research@kingsbay.no">research@kingsbay.no</a> with the request.

# 2.4.9 Other observation platforms

In addition to the above listed common infrastructures, there are some other observatories and platforms run by various other institutions - located at the various buildings in Ny-Ålesund that host

instruments for long-term monitoring. Several of these are available for other users by request to the owner. The Climate Change Tower (CCT) with a height of 32 meter hosts many instruments, mainly to investigate energy budgets in the Earth surface layer, boundary layer dynamics and exchange fluxes at the atmosphere—land interface. The CCT is owned and managed by the CNR. The AWIPEV have several observatories in Ny-Ålesund, which provide regular or continuous data: The Atmosphere Observatory, the Permafrost Observatories and the Underwater Observatory.

# 2.4.10 Workshops available for researchers

Most of the host institutions in Ny-Ålesund have workshops available for the scientists. Please check with your host institution.

#### 2.4.11 Costs

Price list for services and facilities offered by Kings Bay can be found here.

## 2.4.12 Booking of chemicals

If you need chemicals or gas for you project, this can be ordered through RiS. If you have any question to orders of chemicals or gas for you project you can send an email to <a href="mailto:marinelab@kingsbay.no">marinelab@kingsbay.no</a> or <a href="mailto:research@kingsbay.no">research@kingsbay.no</a>. You need to remember to order well in advance since this is dangerous goods and will likely have to be transported by boat.

# 2.5 Additional logistical support from Kings Bay

Kings Bay can also provide assistance with technical issues and purchasing. Should you require any such assistance make sure to contact Kings Bay research advisor at <a href="mailto:research@kingsbay.no">research@kingsbay.no</a> well in advance of your field season.

When you need work done, logistical help or help with purchasing you need to fill out a work order form. Kings Bay will then send you a quote on the work order, and when this is accepted, Kings Bay will provide the requested service.

# 2.6 Cargo and mail

Due to the limitation in the air cargo capacity to and from Ny-Ålesund, most cargo related to research activity must be sent by cargo ship. If you for some reason decide to send cargo by air instead, there is no guarantee that your cargo will arrive Ny-Ålesund in time for the start of your project, due to limitation on how much extra weight it is possible to bring on the plane. Kings Bay can not take responsibility for any delays this might cause in the realisation of your project.

When sending cargo to Ny-Ålesund, always prepare for the return sending as well. This relates to customs issues in your home country, as well as cargo handling issues in Ny-Ålesund itself.

## 2.6.1 Air cargo

Kings Bay AS is responsible for arranging air freight between Longyearbyen and Ny-Ålesund. Please use the list below as a reference guide when sending air freight to Ny-Ålesund:

 The aircrafts operating to/from Ny-Ålesund has limited capacity. Therefore remember to book space for your cargo well in advanced. Please note that while cargo that is booked in accordance with rules and regulations will be prioritised, no guarantee can be given with regards to the exact date of shipping.

- Remember to prepare correct proforma invoice and airfreight document. One copy of each per parcel.
- Air cargo to Ny-Ålesund should be addressed to your host institution, % your name/organization, N-9173 Ny-Ålesund, Norway. Please label all shipments. It is also recommended that you label all shipments with a contact name and phone number.
- Upon arrival in Longyearbyen, Kings Bay's shipping agents will be handling the cargo between terminals. The handling in Longyearbyen will be invoiced separately.
- An airfreight cost of NOK 60,- per kilo will apply on the flights between Longyearbyen and Ny-Ålesund.
- Sending of air cargo should be through Kings Bay reception.

Shipping between any international airport and Longyearbyen airport will be handled in accordance with standard rules and regulations for air cargo. Additional information is provided by <u>Kings Bay AS</u> on air cargo

# 2.6.2 Sending Cargo with couriers

We strongly recommend that you contact your host institution prior to sending any parcels to Ny-Ålesund to ensure appropriate handling of the shipment upon arrival. Sending by mail is in general recommended, but you can also send cargo by agents and couriers like DHL, FedEx, TNT, UPS, as well. Additional fees for parcel handling will arises in Longyearbyen and in Ny-Ålesund.

# 2.6.3 Ship cargo

Bring Logistics Norway operates cargo ship between mainland Norway and Ny-Ålesund (departing from Tromsø). During the summer months, there is one cargo ship approximately every 6 weeks, while the schedule during winter is less regular. Further information is provided by Kings Bay's webpage on ship cargo.

# 2.6.4 Info on frozen samples and dangerous goods

Frozen samples and dangerous goods can be sent with the regular plane, or by ship. When sending dangerous goods the Kings Bay reception must be notified minimum 24 hours before the plane departs from Longyearbyen. This is because such shipments must be registered and labelled in accordance with rules and regulations. If in doubt whether your shipments should be treated as dangerous goods or not, consult with Kings Bay's reception. To send dangerous goods by boat you would need to contact the Harbor master <a href="harbour@kingsbay.no">harbour@kingsbay.no</a>. If you have Laboratory waste (Chemicals and isotope lab waste) you would need to contact the KB marine lab manager (<a href="marinelab@kingsbay.no">marinelab@kingsbay.no</a>).

# 2.6.5 Mail

You can also send postcards, letters and regular small parcels from the Kings Bay Reception. All institutions have their own postbox where they receive letters.

# 2.7 Research synergies (coordination and collaboration)

As described above the four Ny-Ålesund flagship programs promote coordination and collaboration between individual researchers and research groups, and provide meeting places for researchers. All researchers coming to Ny-Ålesund are encouraged to participate in flagship activities, and be in dialog with researchers in related projects to investigate possibilities for collaboration.

There are many ways to coordinate research activities and have synergies for research and shared logistics. The RIS portal now contains a new *Awareness Module* that automatically informs you about

projects related to your own project - either thematically, or geographically. This information automatically pops up when you add your own information into RiS.

# 2.7.1 Ny-Ålesund Science Managers Committee

Ny-Ålesund Science Managers Committee (NySMAC) was established to promote cooperation and coordination between researchers and between research activities in Ny-Ålesund. NySMAC provides advice and comments on research projects, research planning and coordination, infrastructure development, and environmental protection. NySMAC includes representatives from all parties with major vested interests in Ny-Ålesund (currently 18 members and 4 observers), and meets twice every year. Extensive information about NySMAC and Ny-Ålesund research is available on the committee's webpage <a href="here">here</a>. NySMAC also has a <a href="Charter">Charter</a> which describes policies agreed upon by the NySMAC members. The Charter was last updated in 2017.

## NySMAC meetings and internal forum

The institution hosting your project in Ny-Ålesund will inform the other NySMAC representatives about your project in their *Institute Report* at the NySMAC meetings. The Institute Reports provide information regarding new activities, new instruments/installations in the field, use of radio emitting devices, use of airspace, etc.

NySMAC also runs a closed (for members only) forum, the *Project Information and Discussion Forum* (NySMAC PID forum) - an arena for information about, and discussion of activities between NySMAC meetings. Make sure to provide sufficient information about your project to your host institution so that the institution can inform the NySMAC community accordingly.

# 2.7.2 Ny-Ålesund GIS system

Currently NPI is working with Kings Bay and the rest of the scientific community in Ny-Ålesund to set up a Ny-Ålesund GIS system. The system will be used to register information about current and past installations, instruments, manipulations and environmental course of events.

# 2.7.3 SIOS Observation Facility Catalogue

SIOS is currently working on an <u>Observation Facility Database</u>, which includes information about instruments and variables available in Ny-Ålesund. Information include: name of the observation facility, variables collected, location, contact person, identification, and supplement information.

# 2.8 Safety issues

Challenges to fieldwork include polar bears, unstable sea ice, glacier crevasses, avalanches, drifting icebergs, extreme weather and climate, poor communications coverage and scarce infrastructure, to mention the most pressing. The Governor of Svalbard updates different guides and field logs on its web pages that will be helpful in your fieldwork planning. UNIS also writes about Health, safety and Environment (HSE) <a href="here">here</a>. The University Center in Svalbard (UNIS) runs the <a href="here">Arctic Safety Centre</a>, and offers safety courses which address risks and challenges particularly relevant to the Arctic and to Svalbard. Contact <a href="here">UNIS</a> for further information.

Any researcher or research group with activity in Ny-Ålesund is responsible for her/his/their own safety (unless the institution hosting your activities takes this responsibility, and accompany the team out in the field).

#### 2.8.1 Risk assessment

All institutions and/or visiting researchers should take an active role in analysing and managing risk in order to prevent accidents or injuries associated with activities, to minimise any negative impact on the environment, and to ensure a safe work environment. Risk assessment could include the

following steps: 1) Risk identification and assessment - *What can go wrong?* 2) Protective measures – *Minimize risk & problems*, and 3) Accident management and rescue – *Minimize damage*. The assessment should - as a minimum - address the following topics:

- Fieldwork incl. weather conditions, clothing in the Arctic, cold related injuries, etc.
- Handling of rifles and signal guns
- Driving snowmobiles
- Driving and working on sea ice
- Driving and working on glaciers
- Snow & avalanches
- Special environmental rules and conditions in Svalbard, e.g. rabies.

Risk assessment should be addressed during the inbrief at the host institution prior to starting fieldwork.

Kings Bay have a separate form for reporting incidents and accidents.

# 2.8.2 Weapons and polar bears

Polar bear encounters should be considered a real possibility anywhere in Svalbard. Consequently, anyone travelling outside the settlement of Ny-Ålesund shall be equipped with appropriate means of protection against polar bears (rifle, and flare pistol). In order to be allowed to carry a rifle or flare gun one must attend a weapons course provided by Kings Bay (or UNIS or NPI) and prove to be competent.

Kings Bay offers a polar bear safety course for everyone travelling in field. It is mandatory to pass this course (or similar courses from NPI or UNIS) before renting a firearm from Kings Bay.

The certificate issued upon passing the mandatory test which concludes this course is valid for three years.

UNIS and NPI also provide weapon training for scientists and students in Longyearbyen.

#### 2.8.3 Medical services

There is no medical service in Ny-Ålesund, except in the summer season when Kings Bay AS normally employs an on-site nurse. The closest hospital is in Longyearbyen.

#### 2.9 Green research station

# 2.9.1 Environmental Impact Assessment (EIA) work

The Ny-Ålesund Research Station is working systematically to keep the environmental footprint of all activities as low as possible. The last Environmental Action Plan for Ny-Ålesund from 2006 outlined 11 recommendations:

- Set a precautionary upper limit on the total activity/numbers of people at the station.
- Stabilise and reduce local emissions.
- Protect flora and fauna, and re-vegetate degraded tundra areas
- Increase and improve the information provided to all visitors and residents in Ny-Ålesund, giving them guidance as to how they can reduce environmental impacts and minimize conflicts.
- Incorporate the key results of the EIA into the Land Use Plan for Ny-Ålesund
- Prevent fuel spills and establish a station fuel spill contingency and clean-up plan.
- Maintain a high level of waste management.
- Establish the Kongsfjorden area as a "scientific research area"
- Reduce the environmental impacts from cruise ships calling at the station.

- Introduce stricter controls over activities.
- An environmental monitoring documenting pressures on and state of the local environment

Several measures have been initiated for most of the recommendations. The EIA work will be restarted again in 2019.

# 2.10 Outreach - including media in your project

If you plan on bringing a media group or a journalist/photographer to Ny-Ålesund as part of an outreach activity connected to your project, there are some procedures you need to follow. All media visits to Ny-Ålesund require an assessment of the request. The same institution that assessed your research project must also assess your media request in accordance with its own policy and procedures for media and public engagement. This will include selection criteria such as the quality of media output, audience reach, and operational impact on researchers in Ny-Ålesund.

Norwegian media and media from countries not listed above should send their request to NPI at HeadNPI.NyA@npolar.no. Media from countries with a presence in Ny-Ålesund should send their request to the host institution's contact person. You will not be able to book flights or other transportation to Ny-Ålesund for the media team before the request has been assessed and approved by your host institution, which in turn will inform NPI about the visit. Media should not be booked through RiS, but by the host institution directly via Kings Bay at Booking@kingsbay.no. The visiting media must fill in this Media Form and send it to NPI, so that planned activity can can be coordinated and included in the media visit overview for Ny-Ålesund. Please note that all media actors must be briefed by the host institution on the rules that apply in Ny-Ålesund.

#### 2.11 Contact persons

The local head of the institution hosting your project is your main point of contact (se links above). Other point of contacts is listed below.

Who	Contact	Purpose
Head NPI Ny-Ålesund	HeadNPI.nya@npolar.no	General questions related to
		Weekly Meeting, activities at
		Sverdrup, etc.
NPI research coordinator	Research.Nya@npolar.no	General research related
		questions, including use of
		radio emitting devices, GIS
		system, flagship related
		questions, etc.
Head NPI Ny-Ålesund and	Visit.NyA@npolar.no	General questions regarding all
Program leader NPI Ny-		visits by non-researcher groups
Ålesund programme		to Ny-Ålesund, including VIP
		and media.
Kings Bay advisor	adviser@kingsbay.no	Questions regarding Land-Use
		Plan and applications for
		installations of instrument on
		KB land
KB lab technician	marinelab@kingsbay.no	Questions concerning use of
		the common laboratory
		facilities and their equipment
Kings Bay research advisor	research@kingsbay.no	General questions related to
		research logistics and services
		provided by Kings Bay.

#### 2.12 Other resources

# 2.12.1 Maps

The Norwegian Polar Institute offers many <u>online and printed maps</u> of Svalbard and Ny-Ålesund that can be used when planning and performing field work in Ny-Ålesund. <u>Topo Svalbard</u> is a topographical map of Svalbard with place names, updated glacial fronts from satellite imaging and nature preserve zones. <u>Svalbardkartet</u> is an interactive themed atlas of Svalbard supplemented with a rich dataset of environmental data layered on top of a detailed topographic base-map. NPI also has <u>offline maps of Svalbard</u> (including a <u>offline geological map</u> of Svalbard) that works on mobile, tablet and PC.

Mapillary, a platform that host, process, and publish street-level imagery and map data, has been in Ny-Ålesund and created street-level data from the research station. Mapillary create street-level imagery and use computer vision to extract map data at scale. The software is free of use, and a logged in user get access to street views from Ny-Ålesund.

#### 2.12.2 Web-cameras

There are several webcams already in Ny-Ålesund:

- Live webcam from the Zeppelin Observatory (NPI) updated every 10 min
- Panorama images from Zeppelin Observatory (NPI) unstitched, updated daily
- Live webcam from the <u>airport</u> (Kings Bay)
- Live webcam at <u>Havnerabben towards Kapp Mitra</u> (Kings Bay)

# 2.12.3 INTERACT Handbooks

The EU project INTERACT has published several handbooks relevant for this audience. In May 2019 the <a href="INTERACT Fieldwork Planning Handbook">INTERACT Fieldwork Planning Handbook</a> was released. The INTERACT Practical Field Guide will soon follow.

#### 2.12.4 The Governor of Svalbard

The Governor of Svalbard is both Chief of Police and has the same authority as a County Governor in mainland Norway. The Governor also has the principal environmental protection authority in Svalbard. The Environmental Protection Department's main tasks are:

- Nature supervision and environmental monitoring
- Safeguarding the environmental aspects of planning and construction, business enterprises and interventions in nature
- Management of protected areas, flora and fauna
- Oil spill preparedness, pollution control and waste disposal
- Registration, monitoring and maintenance of cultural heritage sites
- Control of import and export of animals and registration of domestic animals

# 2.12.5 Svalbard Integrated Arctic Earth Observing System (SIOS)

SIOS is an international observing system for measurements in and around Svalbard addressing Earth System Science questions. Important components of SIOS include:

- The observing system
- The Knowledge Centre
- The working groups
- The SIOS consortium

# 2.12.6 Svalbard Science Forum (SSF)

Svalbard Science Forum (SSF) was established by The Norwegian Research Council to promote coordination of research activities in Svalbard, to provide integrated and easily accessible

information about research currently ongoing in Svalbard, and to expand and strengthen collaboration between individual researchers and research institutions — both Norwegian and foreign — that are involved in research activities in Svalbard. The forum serves as a coordination and advisory body for all key actors engaged in research activities in Svalbard.

The SSF secretariat administers seed money from the Research Council of Norway through two funding programmes.

- <u>Svalbard Strategic Grant (SSG)</u>: aims at establishing new collaborative research networks in Svalbard, developing existing networks, increasing mobility between research communities in Svalbard, and making research data more accessible.
- Arctic Field Grant (AFG): awarded to students and researchers and covers additional costs for conducting field work in Svalbard and Jan Mayen.

Both of these programmes have application deadlines annually, usually in October.

# 3 PART III: Your stay in Ny-Ålesund

# 3.1 Avoid to bring with you invasive alien species

Invasive alien species are a significant threat to native biodiversity and ecosystems. There are currently few invasive alien species in the Arctic, but more are expected to come due to increased activity in the region. The most effective action to protect the Arctic from the impact of alien species is to prevent the introduction of the potentially harmful alien species in the first place. The most simple measures you can take is to make sure you don't bring any stowaways with you. Brush, hoover and wash your bags, clothes, shoes and equipment before leaving home. More information on this topic can be found on this webpage and in this YouTube film.

# 3.2 Flight and arrival

Lufttransport operates the route between Longyearbyen and Ny-Ålesund. They are located in the hangar building next to the main terminal building servicing flights between Longyearbyen and mainland Norway. Check-in time is 45 min before departure.

Please be aware that the flights are depending on the current weather situation and changes of departures times might occur. Provide a mobile phone number in your RiS booking to be reachable for last minute changes.

If you are bringing a fire arm on the plane, you need to inform about it in the check-in desk. The fire arm will be handled by the plane crew and placed in a secure place on board.

The flight to Ny-Ålesund takes approximately 25 minutes. When arriving in Ny-Ålesund please wait in the plane until luggage and cargo is unloaded and loaded. A minibus will take you from the airport to the Kings Bay Service building where you check in and collect your luggage.

#### 3.3 In-brief at host institution

When you arrive in Ny-Ålesund you will be met by a representative from your host institution at the Service Building. Your host institution will give you an in-brief including all local information that you need to know for your stay in Ny-Ålesund. The In-brief should cover these issues, as a minimum:

- Restriction on radio frequency use
- Fire regulations and procedures
- Ny-Ålesund safety policy and handling of weapons
- Ny-Ålesund rules; location of bird reserves, restricted access areas, snowmobile routes, etc

- Airport regulations
- Ny-Ålesund accident and incident policy
- Risk assessment to include local field hazards
- Boating regulations
- Lab and chemical safety
- Medical care
- Waste management

NPI in-brief can be found here.

# 3.4 Practical information from Kings Bay

#### 3.4.1 Food and meals

All meals (three times a day at given times) are served and eaten in a common mess hall. In the evenings there's self service for making sandwiches.

Meal times					
Low season		High season	High season		
Monday –Frid	lay	Monday – Fric	Monday – Friday		
Breakfast	07:30 - 08:30	Breakfast	07:30 - 08:30		
Lunch	12:00 - 13:00	Lunch	12:20 - 13:00		
Dinner	16:30 - 17:30	Dinner	16:50 - 17:30		
Night meal	19:00 –	Night mean	19:00 –		
Saturday, Sun	days and public holidays				
Brunch	10:00 - 13:00	Saturday, Sun	days and public holidays		
Coffee	15:00 – 16:00	Brunch	10:00 - 13:00		
Dinner	18:30 - 19:30	Coffee	15:00 - 16:00		
		Dinner	18:50 - 19:30		

## Other info from the kitchen:

- If you're planning to be out on fieldwork at dinner time, you can fill out a "late dinner" note at breakfast, and there will be dinner waiting for you to self heat when you return in the evening. Late dinner is available from 19:00 on weekdays and 20:00 during weekends.
- Please leave jackets, hats and bags in the wardrobe before entering the mess. Always wear socks and clean clothes.
- Please remember to wash your hands before entering the mess. Bacteria spreads fast in a small community.
- Please help out to sort dirty dishes as well as the trash after finishing your meal.
- On Saturdays everybody in Ny-Ålesund leave the work clothes at home and dress up a bit. You are welcome to bring your own drink (wine/beer) during weekends.
- In Ny-Ålesund, we love our fresh fruit, and you are welcome to share it with the rest of the people in town. But, please keep in mind that there is a limited supply of fresh fruit and that fresh food in general is dependent on supplies which are delivered by ship approximately every 6th week (during summer).

# 3.4.2 Garbage sorting

In Ny-Ålesund there's a waste management plan, meaning that all garbage is sorted. All sorted waste is then shipped to the mainland Norway. Every one staying in Ny-Ålesund needs to take it's part in the garbage sorting. For that reason, you'll find garbage sorting at all accommodations and

laboratories. All waste is emptied in Varemottaket in Service Building. If you need to throw away garbage of large amount or size, please contact the Kings Bay Harbormaster. There are no deposit of waste in Ny-Ålesund, so all other garbage than daily life garbage need to be registered and shipped to the mainland on the institutions expense. It's not allowed to dump garbage in Ny-Ålesund.

# Disposal categories



# 3.4.3 Laundry/linen

There is a laundry room in both the Service Building and at Evenstad.

Used linen and towels must be placed in the indicated place at *Varemottaket* in the *Service Building*. Clean bedding and towels can be picked up in the linen closet in the laundry room in the *Service Building*.

### 3.4.4 Vehicle driving

Please drive your institute vehicles as little as possible, only for transporting work equipment and other necessities. Please use bicycle, kick sledge, or take a stroll instead as Ny-Ålesund has a manageable size. Respect the speed limit of 30 km/h. All cars are to be parked outside the Service building after work hours. Turn off the engine when you are not driving.

# 3.4.5 Shop

Kongsfjordbutikken is Ny-Ålesund's local shop. Here you can buy souvenirs, snacks and candy, some toiletry items, soda and alcohol. Due to special Svalbard regulations you need to bring your boardingpass from the mainland connection flight if you're planning on buying alcohol. The shop accepts credit and debit cards. The regular openings hours are Mondays and Thursdays 17:00 – 18:00. Other opening hours will be announced on the whiteboard in the Service Building.

## 3.5 Use of radio

Stations will be equipped with VHF radios that monitor an internal channel and international emergency channel 16. When personnel are in the field the station radio will be monitored.

# 3.6 Use of airspace

If using the airspace (f.ex. drones, balloons, etc. ) dialogue and coordination with Kings Bay AFIS (airport@kingsbay.no) is required.

# 3.7 Research in Ny-Ålesund

# 3.7.1 Weekly meeting

Acting managers or senior representatives from the research institutions present in Ny-Ålesund, together with representatives from NPI and KB meet on a weekly basis - every Wednesday at 08:15 in the Zeppelin meeting room in the Service Building. NPI chairs the meetings and writes the minutes.

The purpose of the weekly meeting is to exchange information about ongoing and planned research activities, to coordinate ongoing research activities and the use of facilities, and to follow up any action items. The goal is to further improve on-site awareness and coordination, collaboration, and an efficient and sustainable use of the research infrastructures within the Ny-Ålesund Research Station.

# 3.7.2 Popular science talk

We encourage all researchers to take the opportunity to present their work by giving a "Popular Science Talk" while working in Ny-Ålesund. This is a short presentation, 20-30 minutes plus q&a, giving an overview of research/monitoring activities to the community. This is also a great opportunity to share information and connect with other researchers.

If you want to contribute to this, write an email to Head of NPI at <a href="HeadNPI.NyA@npolar.no">HeadNPI.NyA@npolar.no</a>.

# 3.8 Special restrictions in Ny-Ålesund

Please note that there are some special restrictions in Ny-Ålesund to take into consideration. A map of the restricted areas in Ny-Ålesund and Kongsfjorden is seen <a href="https://example.com/heres

#### 3.8.1 Bird reserve

Between May 15th and August 15th you are not allowed go inside the marked areas on the map (add link to map - around Solvatnet and next to the dog kennel). Exceptions apply to scientific projects that have the appropriate permissions. You need to apply/ask Kings Bay if you intend to do scientific activities that requires going inside the restricted areas.

#### 3.8.2 Instrument areas

Please do not enter the instrument areas unless you need to maintain or look after your instrument. If you need to go inside the instrument area, please pay attention to the other instruments there, some might be hard to see.

As a main rule, keep to the roads while walking in town. The tundra is vulnerable and might contain instruments and fragile cultural heritage that is hard to spot. In the winter dedicated snowmobile routes for travel to and from Ny-Ålesund are in place (add map).

# 3.8.3 Snow sampling areas

Areas east of the Old Post Office, east of Italy building and the AWIPEV observatory, and east of Gruvebadet are dedicated for snow sampling throughout the winter season, and should not be entered. The use of snowblower is also restricted to avoid contamination to these areas.

## 3.8.4 Restrictions in Kongsfjorden

Several of the islands in Kongsfjorden are bird reserves between May 15th and August 15th. This means that activity is banned on, and in an area of 300 meters around, the islands. The banned activity includes both boating, kayaking and disembarking.

Kongsfjorden is also protected against fishery activities. The regulation includes all fishing by trawl for commercial reasons. Fishing by trawl includes also similar activities that could damage the bottom conditions in the fjord, including trawling for seaweed, kelp, and shells. Fishing for scientific reasons or whale hunting is not included in this regulation.

#### 3.9 Current weather information

The current weather in Ny-Ålesund can be found at AWIPEV webpage <a href="here">here</a>. The forcat from yr.no is found <a href="here">here</a>, and last days weather statistics <a href="here">here</a>.

MET Norway makes daily Ice Charts, and the latest is available <u>here</u>. The Norwegian Mapping Authority's tidal calender can be found <u>here</u>.

# 3.10 Safety

Institutions and individuals are strongly encouraged to share all information concerning safety, including the position of crevasses, polar bear sightings and avalanche dangers. Information should be posted on the whiteboard in the Kings Bay mess building.

#### 3.10.1 Watchman

Kings Bay's power station watchman is on duty 24/7. Please contact the watchman if you see a polar bear inside Ny-Ålesund, or close to Ny-Ålesund, if you detect a fire, water leakage or other situations which can develop danger, or in case of accidents. The Watchman's phone is (79 02) 72 38.

# 3.10.2 Kings Bay safety course

Check with Kings Bay reception to confirm your attendance at the safety course and get information on when it is held (usually on the day of arrival). The safety course has a duration of 3 hours.

#### 3.10.3 Rifle

Always bring a firearm and a flare gun with you if you travel outside of Ny-Ålesund. Half load the rifle at designated areas at Ny-Ålesund boarder. The rifle should always be carried with "bolt open" when inside the Ny-Ålesund city limits.

Firing off rifles and flare guns outside the shooting range in Ny-Ålesund is forbidden unless it's an emergency. At the shooting range, please remember to raise the flag, informing others about your activity. If an incident regarding firing off rifles occurs outside of the shooting range, it must be reported.

#### 3.10.4 Polar bear

If you see a polar bear close to or inside Ny-Ålesund, call the Watchman (7238) and keep safe distance, preferably indoors.

When a polar bear is observed close to Ny-Ålesund, and reported to the watchman, the watchman will notify the reception. The reception sends out an email with polar bear information to all NPI, all institutions and Kings Bay staff as well as writing information on the board in the reception. The reception then sends out a short warning on channel 16: *All institutions present, all institutions present. This is the reception, this is the reception. General warning, contact your local leader, general warning, contact your local leader.* After work hours more information is to be found on the white board in the reception area. Please note that a polar bear on one side of Ny-Ålesund quickly can move to the other side.

# 3.10.5 Fire

Information on how to behave in case of a fire is posted at the entrance of every living quarter and on the room door. Make sure you are familiar with the procedures during fires.

# 3.10.6 Siren/Warning signal

In case of a fire or major accident a siren will go off in town. If this happens, assemble in front of the Service Building

#### 3.10.7 Safety in the field

When in the field, researchers are responsible for their own safety (unless the host institution takes on this responsibility and accompanies the team out in the field). Host institutions have typically set up systems with a field activity book/whiteboard where researchers are asked to provide information on where they are going, when they expect to be back and what kind of communications and safety equipment they are bringing. The host institution will monitor the field activity book/whiteboard, and take action if a group is not back in Ny-Ålesund at the time given in the registration.

Risk assessment and mitigations should follow the host institution's routines.

#### 3.10.8 Safety in the lab

Risk assessments and mitigations in the lab should follow the host institution's own procedures. The user needs to sign the lab user agreement to prove that they would comply with the Kings Bay laboratories user routines as described in the HSE user agreement before they can begin to work in the lab. The responsibility for methods, chemical use, and laboratory work routines lies solely with the user.

# 3.11 Reporting of accidents and incidents

Reporting of incidents and accidents should be done to Kings Bay on a predefined form. The form can be found in the Kings Bay Reception. One examples of a incident to report is firing off a rifle outside of the shooting range.

#### 3.12 Medical services

- In case of a medical emergency, dial 0 1-1-3 to Longyearbyen Hospital. After calling the hospital, please inform the Kings Bay Watchman (7238)
- If you need medical expertise i.e. not critical illness or injuries please contact Longyearbyen hospital at 0 7902 4200. They will assist you further.
- During the high season a nurse is on site in Ny-Ålesund. Consulting/visiting hours is reserved to one day a week. Please contact the Kings Bay reception for more information about visiting hours, or the watchman outside work hours. If there is an injury outside of visiting hours, please contact the Kings Bay Watchman or Reception.
- The Kings Bay reception sells some non-prescription medicines.
- There are two defibrillators in Ny-Ålesund. One is located in the reception area in the Service Building and the other one at the museum during summer.
- Kings Bay is together with AWIPEV currently setting up facilities for telemedicine

# 3.13 Social activities and leisure time

The social activities arranged in town are open for all, also visiting scientists. There is a museum in town which is open 24/7 with free admission. Velferden (The Welfare) is open for everyone staying in Ny-Ålesund, and runs a gym, has a jacuzzi, lends out boats and kayaks and arrange social gatherings (pub), etc. Velferden also administers access to a number of cabins in the area which can be used on your spare time (map of Velferden cabins <a href="here">here</a>). Lists for reservation of boats, kayaks and cabins are hung up on the board in the reception area every Monday.

## 3.14 Out-brief and own evaluation

Just as important as checking *in* when you arrive, is the checking out when you leave. Please clean up the used areas, sort and recycle your garbage, and agree with your host institution or Kings Bay how

to get rid of dangerous waste. You should also return rented equipments, both to the institution hosting your project and/or Kings Bay.

Please agree on a specific time for check from labs out with the Kings Bay lab manager.

Also agree on a check-out time with the institution hosting your project. Please update the institution on your work, and update the Ny-Ålesund GIS form (if needed).

# 3.14.1 Registration of discrimination and harassment

We work on setting up a common system for registration of discrimination and harassment in Ny-Ålesund. Please report your incident to our system (in addition to procedures you may have at your employer).

# 3.14.2 Departure

Luggage must be checked in at the reception no later than one our prior to departure time from Longyearbyen, and passengers must be in the reception area 15 minutes prior to departure from Ny-Ålesund.

## 4 PART IV After fieldwork

# 4.1 Evaluation and follow-up

#### 4.1.1 Online evaluation form

Feedback from users is important in the continued development of services offered by The Norwegian Polar Institute, by Kings Bay AS and by institutions with activity in Ny-Ålesund. We therefore encourage researchers to share their thoughts on what works, and where we need to improve our information and services.

The Ny-Ålesund Research Station Feedback Form is available here.

The feedback forms will be sent to Head of NPI in Ny-Ålesund. In following up specific items, other entities in Ny-Ålesund will be included in the discussions. E.g. feedback related to the operation of common infrastructure will call for participation from Kings Bay AS, etc.

If you would like, the feedback can be submitted anonymously.

#### 4.1.2 Follow-up

Scientific contributions originating at the Ny-Ålesund Research Station will be presented in an annual report, highlighting research results, including a list of publications, contribution to international networks and important research campaigns. All institutions, research groups and researchers with activity in Ny-Ålesund are encouraged to contribute actively to the annual report.

If you have set up a new instrument, or manipulated the ground please add the information into the Ny-Ålesund GIS system or SIOS OFD. Please also update your project information in the RiS portal.

# 5 PART V General visitor information

# 5.1 Brief history

Located in the archipelago of Svalbard, Ny-Ålesund is one of four settlement in Svalbard. Ny-Ålesund was originally founded as a mining community, and coal was initially extracted by Kings Bay AS from 1916 to 1929. Between 1930 and 1940 Ny-Ålesund saw the establishing of both a fishing station and a hotel. Coal mining operations started again in 1946, but were marred by a number of serious accidents. Mining operations ended in 1963 after a major accident on November 5th 1962, where 21 people died.

Scientific observations began in 1964 when the European Space Research Organisation (ESRO) opened a satellite telemetry station. ESRO was joined in 1966 by the Tromsø Northern Lights Observatory. The Norwegian Polar Institute opened a research station in 1968, and Cambridge University (UK) opened a summer field base in 1972.

The first regular Norway – Svalbard air-link in September 1975, providing one flight per week, made Svalbard the most accessible High Arctic region in the circumpolar north, and the number of scientists and "expeditions" increased dramatically. The Norwegian Government saw the importance of a location for field based science in Svalbard and chose Ny-Ålesund, with its varied topography rich in polar flora and fauna and existing infrastructure including a harbour and airstrip, as a main location for such activities.

The Ny-Ålesund International Scientific Community, which began in 1991 included four research stations. The name "Kongsfjorden International Research Base" (KIRB) was later used to refer to the entire Ny-Ålesund and Kongsfjorden area.

Over time, with the addition of activity from institutions from a number of nations, it became clear that setting up a formal body tasked with managing research activity and promoting inter-station collaboration and mutual understanding, would benefit the entire research community in Ny-Ålesund. Consequently, Ny-Ålesund Science Managers Committee (NySMAC), with one representative from each institution present in Ny-Ålesund, was established in 1994.

Most of the buildings in Ny-Ålesund today are from the mining period, and 29 of them are protected by law. This means that Ny-Ålesund has the largest collection of cultural heritage buildings and items anywhere in Svalbard. For more information about Ny-Ålesund's history, you are welcome to visit the Ny-Ålesund museum during your stay.

#### 5.2 Location and time

Ny-Ålesund is located in Svalbard, Norway, at 78.9° N, 11.9° E. Wikipedia information about Ny-Ålesund <a href="https://example.com/here">here</a>. Standard time zone in Svalbard is UTC (CET) + 1 hour. In summer, Svalbard uses the central european summer time UTC + 2 hours.

The power supply is 220V/50Hz and power sockets in Svalbard are equal to european type C and F.

# 5.3 Weather and seasons

From the beginning of April to the middle of September, it is never really dark. From mid-April to the end of August, the sun never sets. The real dark period, with the sun continuously below the horizon, lasts from the middle of November to the end of January.

Winter: dark, cold, snow cover (December-February)

Spring: bright, cold, snow cover (March-May)

Summer: bright, warm, humid, mud/rain (June-August)

Autumn: getting dark and cool, rain/snow (September-November)

General information about weather and weather statistics can be found here.

# 5.4 Biodiversity and natural environment

Ny-Ålesund is surrounded by Arctic tundra and river plains, while the mountains in the inner part of the Brøgger Peninsula have many small glaciers. Large glacier tongues flow into Kongsfjorden on the eastern and northern side of the fjord. Most of the bird species present in Svalbard are found breeding on small islands or on bird cliffs in Kongsfjorden. Reindeer and foxes are common visitors in Ny-Ålesund. Seals are often seen close to the settlement, and sometimes also walrus and beluga.

The Kongsfjorden area is especially attractive for arctic research since almost any topic can be studied in, or in the vicinity of Ny-Ålesund. Glaciologists will find glaciers within walking distance, biologists find bird cliff s and land mammals close by, atmospheric scientists find clean arctic air suitable for their research, and the ocean is easily accessible for marine research of any kind. An overview of research in Ny-Ålesund can be found in the RIS database.

## 5.5 The human dimension

Ny-Ålesund is in general only accessible for researchers. During the peak season (July-August) 150-180 persons stay in Ny-Ålesund, but their number drops drastically to 40-60 people in spring and autumn. Only the permanent staff (30-40 people) is present during the winter months.

# 5.6 What to bring

In winter and spring, special polar clothing is strongly recommended. Temperatures down to  $-30^{\circ}$ C and below require special caution when going outside. Also in summer and autumn, winter clothes like cap, gloves and warm jacket are necessary. In summer and autumn, the climate conditions are comparable to autumn and winter in central Europe. For land excursions in this period, especially in the summer, waterproof shoes are essential. Generally it is very muddy on the unfrozen permafrost ground during July and August. In the bright time of the year it is important to have good sunglasses with you. The snow cover allows snowmobile and ski traffic from roughly December to May or June.

The use of outdoor shoes inside is not permitted. Normally, you can choose to have a pair of indoor shoes at your workplace and in your accommodation. In the Kings Bay Service building you can borrow Crocs, or wear socks.

## 5.7 Insurance

We recommend that you have travel insurance. The weather in the Arctic is unpredictable and the plane might be delayed by hours or days. This means that you can risk missing your connecting flights, hotel reservations and so on, and pay extra for any changes. In Ny-Ålesund, Kings Bay will charge you for accommodation starting at your planned arrival date, even if arrival is delayed due to flight cancellations or delays. You will also be charged for any extra days spent in Ny-Ålesund as a result of delayed departure. If you have booked a plane ticket, but decide to go by boat instead, you will still be charged for the plane ticket.

# 5.8 Currency

Norwegian Kroner is the currency in Ny-Ålesund. You can withdraw money from the Kings Bay reception during its opening hours.