Combination of CP & CSA

D2.2 – Minutes from Station Managers’ Forum II

Project No. 262693 – INTERACT

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Lead partner for deliverable: NERI

Author: Elmer Topp Jørgensen

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The Second Station Managers’ Forum was held in Hvalsø, Denmark, 10-13 October 2011 with 41 participants, representing 28 of the 33 INTERACT stations and four observer stations. The meeting lasted four days of which three were spent discussing the deliverables of the INTERACT work packages (D2.2) and one day was an international workshop focussing on international collaboration related to “Understanding Biodiversity Changes and Causes” (see Deliverable D3.1).

Sessions were set aside for all work packages to present status of deliverables and get input from station managers and the INTERACT partners. Three INTERACT stations presentations were given as inspirational breathers between work package sessions. The presentations included general information about the infrastructures and a selected theme (infrastructure research and monitoring programme) relating to the focus of the international workshop.

Six new stations have joined INTERACT as observer stations during 2011 and talks have been initiated with another four stations as well as a Canadian network of stations and Antarctic stations. Four of the Observer Stations participated in the Station Managers’ Forum II meeting and made short presentations of their infrastructures.

The minutes of the meeting were prepared, circulated, approved and posted on the INTERACT web site as Deliverable D2.2 (http://www.eu-interact.org/fileadmin/user_upload/pdf/SMF_2/Minutes_-_Station_Managers__Forum_2_-_10-13_October_2011__Denmark.pdf)

Many of the actions planned during the meeting and described in the minutes have been set in progress or have been fulfilled after the minutes were prepared.
Minutes of INTERACT

Station Managers’ Forum 2

INTERACT – International Network for Terrestrial Research and Monitoring in the Arctic

10-13 October 2011, Sonnerupgaard Gods, Denmark
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Summary of activities

A four day Station Managers’ Forum meeting was held 10-13 October 2011 at Sonnerupgaard Gods in Denmark. Three of the four days were spent discussing the deliverables of the INTERACT work packages and one day was an international workshop focussing on international collaboration related to “Understanding Biodiversity Changes and Causes”.

Sessions were set aside for all work packages to present status of deliverables and get input from station managers and the INTERACT partners.

Three INTERACT stations presentations were given as inspirational breathers between work package sessions. The presentations included general information about the infrastructures and a selected theme (infrastructure research and monitoring programme) relating to the focus of the international workshop.

Six new stations have joined INTERACT as observer stations this year (and talks are initiated with another four stations as well as a Canadian network of stations and Antarctic stations). Four of these participated in the Station Managers’ Forum II meeting and made short presentations of their infrastructures. We are pleased to see the commitment to work together and warmly welcome the new stations into our network.

The international workshop was co-hosted by INTERACT, International Arctic Science Committee (IASC) and Arctic Council’s Circumpolar Biodiversity Monitoring Programme (CBMP). To ensure that the local community perspective was represented in our meeting, the Indigenous Peoples secretariat was a key speaker in setting the scene for the international workshop.

42 people participated in the INTERACT part of the SMF II meeting, representing 28 of the 33 INTERACT stations and four observer stations.

83 people participated in the international workshop, representing a large number of Arctic networks, programmes and projects.

Presentations from the INTERACT meeting and Joint Workshop will be available on the INTERACT website-under the Station Managers’ Forum.

Key things to remember

INTERACT’s annual meeting II and Station Managers’ Forum 3 will be held 27 February – 1 March 2012 in Svanhovd, Kirkenes, Norway.

Distribute INTERACT brochures at your station, meetings, conferences, etc. Brochures can be ordered from the Secretariat att. Susanna Olsson Susanna.olsson@nateko.lu.se.

Keep a list of international meetings at which you represent INTERACT (used to report INTERACT activities to the EU).

Send news from your station, vacant positions, and information about conferences, events, developments and rare observations, etc. to the INTERACT website att. Susanna Olsson Susanna.olsson@nateko.lu.se.

All INTERACT participants are encouraged to promote the third TA call on their website and through other outreach mechanisms if relevant.

Use PROGECTA to find deliverables and other documents relating to the INTERACT work packages.
Session 1: Introduction

1.1 Opening statement
By Station Managers’ Forum Chair Morten Rasch, Department of Bioscience, Aarhus University, Denmark.

“During the months that have passed since our last meeting in Abisko 18 January 2011 the INTERACT partners have transformed the formal project proposal into an anthill of activities. This is due to the enthusiasm and motivation of station managers and participants, but also due to the fact that we see each other as a group of friends. It is hoped that this positive approach to the project will continue and that we will develop the cooperation and friendship even further.

A warm welcome to the new research stations that have joined INTERACT as observer stations. Six new stations have signed agreements and INTERACT have – with Terry Callaghan’s visionary thinking – gone alpine. Four non-INTERACT stations were able to participate in the Station Managers’ Forum II:

- Krkonose Mountains National Park, Czech Republic – represented by Jaroslav Andrle
- Aktru Field Station, Russia – represented by Sergey Kirpotin and Sergey Astakhov
- Czech Arctic Station, Svalbard – represented by Alexandra Bernadová
- UK Arctic Research Station, Svalbard – represented by Nick Cox

We have four exiting and busy days in front of us. Despite that, we are a four-year project we have many deadlines approaching. We therefore have to work hard over the coming days to make sure that we will be able to continue our common success.

As a chair of the Station Managers’ Forum and responsible for international cooperation, I especially look forward to the Joint Workshop with IASC, CBMP and INTERACT, which in my perception will be the start of a more coordinated and practical approach to data collection in Arctic terrestrial ecosystems. In my view 12 October 2011 should become a day to be remembered for the change from years of discussion of how to organize data collection in the Arctic to something much more practical. Let us use this opportunity to learn more about some of the other initiatives in the Arctic and I strongly encourage you to network with them during the SMF II meeting.

With this I would like to thank you for attending the meeting and warmly welcome you all to the INTERACT Station Managers’ Forum II meeting.”

1.2 Introduction of participants
All participants presented themselves and their infrastructure/organisation.
1.3 Agenda and practicalities
By Elmer Topp-Jørgensen, Department of Bioscience, Aarhus University, Denmark.

The Station Managers’ Forum 2 meeting (SMF 2) was a combination of Work Package (WP) sessions and breathers (research station presentations) interspersed between sessions. WP sessions focused on getting information from participants, while breathers provided an opportunity to enjoy facility presentations of other INTERACT infrastructures and their scenic settings.

The agenda also included a presentation of the project “Back to the Future” and a session on ecosystem services delivered by INTERACT stations. These will be described in the minutes.

Breathers will be available to see on the INTERACT website (www.eu-interact.org) and are not included in the minutes of the SMF II meeting.

The Agenda was followed with minor adjustments:

a) On day two under Session 8, the University of the Arctic was unable to participate due to illness and was thus taken off the agenda. The rest of the session followed the agenda.

b) On day two a session was inserted to discuss synergies between INTERACT and the other circumarctic terrestrial research and monitoring initiatives in preparation for the Joint Workshop (day three).

Day three was set aside for a Joint Workshop with IASC and CBMP “Understanding Biodiversity Changes and Causes – Synergies in Arctic Terrestrial Biodiversity Research and Monitoring”. A separate workshop report will be attached to the SMF 2 minutes.

1.4 Presentation of WP2 deliverables
By Elmer Topp-Jørgensen, Department of Bioscience, Aarhus University, Denmark.

A presentation of WP2 Station Managers’ Forum deliverables was given. WP2 should act as a platform for exchange of information between station managers, work packages and local communities.

The means available for providing this platform are the Station Managers’ Forum meetings, report deliverables, the INTERACT website and a dialogue forum (minutes from WP2 sessions can be found in this document).

Reports and SMF minutes deliverables of WP2 including deadlines can be seen to the right.

1.5 News from the INTERACT Secretariat
By Terry V. Callaghan, Margareta Johansson and Susanna Olsson, INTERACT Secretariat.

The INTERACT network continues to grow and since our last meeting in Abisko (January 2011), six new stations have joined INTERACT as observer stations. The stations in INTERACT host a number of other networks, programmes and projects on the international scene. INTERACT thus forms a unique and strong site based platform for terrestrial research and monitoring in the Arctic.

With the expansion of the network, alpine stations from lower latitudes have been added and INTERACT is now represented in 18 countries.
The INTERACT Advisory board has been established and consists of highly qualified people. We aimed high and we got what we wanted.

The INTERACT Transnational Access Board has been established. The board is a mix of infrastructure representatives and independent experts.

The board has already executed two successful calls and one TA project resulted in a press release on a new record ice loss from the Greenland glaciers (more information on the Transnational Access WP can be found later in this document).

The INTERACT network is now endorsed by:
- CAFF/CBMP
- AMAP
- IASC
- ISAC
- SAON
- WWF

INTERACT endorsed by:

INTERACT International Advisory Board
- Karl Erb Director, Polar Programmes, National Science Foundation
- Tony Hey Corporate Vice President, Microsoft Research
- Karl Laine, European Polar Board
- Volker Rachold, Executive Secretary IASC

Andrei G. Degermendzhy Director, Institute of Biophysics, Russian Academy of Sciences RAS
Nick Xenos INAC (Dept Indian Affairs and Northern Development), Canada
SAON confirmed but representative to be decided
Global GEOSS/GEO to be identified

INTERACT Trans National Access Advisory Board

Infrastructure representatives
- Wladimir Bleuten (Russian Stations)
- Jan Dick (Iceland, Scotland & Faroe Islands)
- Christer Jonasson (Sweden/Norway)
- Riku Paavola (Finland)
- Morten Rasch (Greenland)
- Warwick Vincent (North American)

Independent experts
- Terry Callaghan, Royal Swedish Academy of Sciences
- Christian Körner, University of Basel, Switzerland
- Hugues Lantuit, Alfred Wegener Institute, Germany
- Philip Wocock, University of Stirling, UK
The Secretariat acknowledges the huge progress that has been made by the work packages and that there have been no delays or deviations from the work plan. Some deliverables are already available on PROGECTA (e.g. ScanDB Software Specification Report and SMF 1 minutes) and all INTERACT partners are encouraged to use PROGECTA to find all deliverables that have been submitted. Additional information will also be uploaded here (e.g. progress reports, documents related to deliverables, etc.).

Instruments have been installed during the summer (2011) at selected INTERACT sites to further investigate feedback mechanisms, especially energy and greenhouse gas exchange.

INTERACT has been represented at numerous meetings and conferences e.g.:
- Royal Colloquium
- Arctic Science Summit Week
- COMNAP and Crown Princess of Sweden
- Aktru Summer School
- EU Infrastructure Committee planning group
- VIP high level Nordic research on adaptation
- IASC Council meeting
- VEGA day
- Forum of Arctic Research Operators Annual meeting
- Scoping workshop on Arctic Change Assessment
- Scoping workshop on Arctic Resilience Report
- ISAC - International Collaboration and Cooperation in Arctic Science Planning for the Future
- SIOS - Synergies and cooperation with ESFRI and Large Scale Integrated projects in the Arctic
- European Environmental Agency – workshop: Lay, local, traditional knowledge and citizen science
- AMAP – The Arctic as a Messenger for global processes – Climate change and pollution

The Secretariat encourage INTERACT partners to keep a list of international activities where you represent INTERACT. WP3 will send out a form (developed by WP1) for reporting meetings/workshops/conferences where INTERACT is represented, including information on where, when and how to submit the information.

The INTERACT website is up and running thanks to hard work by Hanna Frykman and Susanna Olsson and an INTERACT brochure is fresh from the press. Please bring copies with you when you go to meetings and conferences. Copies can be ordered through the Secretariat att. Susanna Olsson Susanna.olsson@nateko.lu.se.

The dates for the next annual meeting have been set to 27 February – 1 March 2012. Location: Svanhovd, Kirkenes, Norway.

The Secretariat concluded with thanking all INTERACT participant for their committed involvement, encouraged participants to further strengthen their networks and enjoy the great company of INTERACT friends.

Work package specific tasks:

<table>
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<tr>
<th>WP1 and 3</th>
<th>List of International meetings and conferences where INTERACT has been represented.</th>
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<td>- WP3 will circulate a form (developed by WP1) for reporting meetings/workshops/conferences where INTERACT is represented.</td>
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Session 2: WP2 report concerning “Abilities of INTERACT stations”
By Hugues Lantuit, Alfred Wegener Institute (AWI), Germany.

Hugues Lantuit explained that he represented Dirk Wagner and AWI at this meeting, but that Dirk would remain the contact person for the WP2 deliverable “Report concerning abilities of INTERACT stations”. (Post meeting note: Dirk Wagner has been offered another position and AWI will appoint a new person to complete the task).
Hugues explained that the deadline for the report is March 2012. He gave an overview of draft contents and presented a draft layout (see below).

Participants wanted to have the draft template in print to provide comments. The template was sent electronically to participants. Hugues asked for comments to the draft template to be sent to Dirk Wagner no later than 17 October.

**Initial comments from participants:**
- It was a general agreement that we should keep the template simple and expand later if needed.
- Station information should be searchable in a web database. This links to elements in WP7 and it was agreed that WP1, 2 and 7 identifies synergies and a way forward to avoid redundancy.
- It would be good with a section on training provided at the station (e.g. basic health and safety, firearms, science, etc.), but only if it can be kept simple. The same goes for equipment and services provided at the stations.
- The station catalogue can be a valuable marketing tool for the stations and INTERACT as a whole. It is therefore important that station managers prioritise the task of describing the station in a short text, list the facts about the station and provide photos all according to the template and guideline that will be send out by AWI.

It was decided that:
- The report should be printed as a booklet (Department of Bioscience, Aarhus University will assist with layout. AWI is to communicate with Elmer Topp-Jørgensen jetj@dmu.dk).
- AWI should include observer stations in the catalogue.
- AWI should provide clear descriptions and definitions of topics/categories and units when sending template to station managers.
- AWI should provide examples of other stations when sending out the template.
- The catalogue should include map of the station and surrounding area.
- INTERACT should seek to identify gaps in the network (Russia/Svalbard) and try to include these in the report (WP1/WP2).
- AWI need to identify titles of text paragraphs describing the stations (cf. INTERACT website) for the template.
- The catalogue should include text description of the stations, facts about the station, map (both overview and local area) and photos (of infrastructure and surroundings). This should be used to update the INTERACT website “Field Sites” section. AWI should send incoming text, facts about the stations, maps and photos to Susanna Olsson (WP1), Susanna.olsson@nateko.lu.se.
### Time plan:
The aim is to have information from all stations by mid-December 2011 and to send the final document for layout and print mid-January 2012 (Post meeting note: plan modified after the meeting).

### Work package specific tasks:

| WP1, 2 and 7: AWI, Elmer Topp-Jørgensen, Morten Rasch, Tomas Thierfelder, Sofia Bryntse, Susanna Olsson | Station catalogue available on website, including searchable database. Station information should be searchable in a web database. This links to elements in WP7 and it was agreed that WP1, 2 and 7 identifies synergies and a way forward to avoid redundancy. |
| WP2: AWI, Elmer Topp-Jørgensen | Coordinate information collection and layout. AWI is to contact Elmer regarding layout. |
| WP2: AWI | Text description of stations for the INTERACT website AWI to send incoming text, maps and photos to Susanna Olsson (WP1) Susanna.olsson@nateko.lu.se. |
| WP1: Terry Callaghan, Margareta Johansson | Close geographical gaps in the INTERACT network WP1 is to identify and seek agreement with stations that can fill geographical gap. Stations should be included in station catalogue if possible. |

### Session 3: WP2 report concerning 'Best practises of station management and administration at arctic research infrastructures'

*By Elmer Topp-Jørgensen, Department of Bioscience, Aarhus University, Denmark.*

Elmer presented the deliverables including topics to cover according to the work plan and input from SMF 1 (in Abisko). This information was also included in a hand out document together with a draft template based on this information and INTERACT station websites. Participants were hereafter divided into four break-out groups to discuss how we should structure the report to make it useful for station managers and discuss what topics we would like to cover. Deadline for the deliverable is March 2013.

**Group 1 - Priority areas:**

**Must be there:**
- a. Health and safety
- b. Permitting issues (types of permits required, essential contents of permits, procedures and user guidelines, etc.)
- c. Science programme
- d. Outreach and marketing

**Should be there:**
- a. Eco-policies (renewable energy solutions, heating systems, recycling, waste handling, etc.)
- b. Education / courses
- c. Knowledge capturing and sharing

**Could be there:**
- a. Station infrastructure and management planning

**Group 2**
The report should be structured as a manual where you can look up a specific topic. The contents section is therefore important.

**Following should be addressed or taken into consideration in the report/manual:**
- The report needs to consider different policies for large and small stations
- Recommendations should be applicable to all stations
- Stress importance of knowing national regulations
- Describe rules and responsibilities
- Book of rules available on website (and what happens if you break rules)
- Briefings are important (rules, conditions, procedures)
- Demand relevant training in relation to activities (first aid/medical training, firearm, wildlife, glacier, communication, extreme weather events, etc.)
- Procedures for dealing with young scientists (e.g. supervisors)
- Describe importance of Science Advisory Committee (to include local community) for the station or describe where to get advice on science plans/activities
- Keep track of land use and provide information of its history within the area covered by the station
- Community feedback (monthly/annual forum. Anonymous feedback essential. Explain what have happened to previous suggestions. Produce minutes from feedback meetings as a reference)
- Keep inventories of equipment

Group 3
The report should be in the form of an encyclopaedia and it is important that the report will act as inspiration for others. It should include a variety of examples of good practises to accommodate the differences between different types of stations (e.g. large/small, remote/less remote). It is important with a good index for the report that makes it easy to find the information you are looking for.

Following should be addressed or taken into consideration in the report/manual:
- Be aware of the different levels (government, science, local community) when describing best practises for a given topic
- Have a science advisory board that the station manager can ask for advice (e.g. to avoid new projects interfering with existing/previous projects or to ensure good science)
- Keep a map of land use history at the station
- Have a mechanism for cooperation between different projects (e.g. station may provide template Memorandum of Understanding) to avoid conflicts over research area and between projects
- Different food scenarios (Cook, cooking groups, individual)

Group 4
It is important with a good index. The draft template (in the hand-out document) was considered too detailed for some topics to be useful as an index.

Priority areas
1. Emergency/health and safety
2. Insurance issues (practical considerations and legal responsibilities)
3. Permit issues

Following should be addressed or taken into consideration in the report/manual:
- What is understood by a “master plan” should be described better
- Data sharing need to be defined (differentiate between different projects/funding origins, e.g. government projects, student data)
- Equipment sharing should be addressed

It was hereafter discussed how we should identify best practises (or examples of good practises). It was suggested that we should make a ‘wiki-management practises’ where stations can describe their way of doing things for topics for which they feel they have identified a good practise. Elmer will look into possibilities for that on the INTERACT website. Low tech solution will be to let stations offer to provide input to specific topics at the next Station Managers’ Forum meeting (held in conjunction with the next annual meeting 27 February – 1 March 2012).

Work package specific tasks:

| WP2 | Template for ‘Best practise for station management’. Elmer to draft template based on input to be ready for SMF 3 held in conjunction with the second Annual INTERACT consortium meeting |
| WP2 | Possibilities of a ‘Wiki-practises’ Elmer to investigate possibilities of a web-based ‘wiki-practises’ on the INTERACT website. |
Session 4: Ecosystem Services delivered by INTERACT stations
By Jan Dick, ECN Cairngorm, Scotland.

In the ecosystem service session, twelve people formed a core group interested in developing the concept of ecosystem services as a monitoring technique for arctic sites. In the first instance, they critically examined the ecosystem service list of parameters developed in the LTER Europe community in order to ensure compatibility of methodology with the wider LTER community but added services, which were important in the Arctic. A separate report details the outcome of the meeting and the list of ecosystem service parameters drafted. In general the LTER Europe list was considered useful but

(i) The current list do not distinguish sufficiently between services which were provided due to human management of the ecosystems and those provided without human intervention, e.g. commercial farmed berries compared with wild berries,
(ii) Services unique to coastal landscapes were poorly represented, e.g. whale oil for heating,
(iii) Services provided by snow and ice, e.g. for house contraction and transport, where missing from the list.

The value of ecosystem services as an over-arching assessment which can either be a simple check list assessment or a more in-depth analysis of particular ecosystem services, e.g. biodiversity in connection with a citizen science programme or ecosystem service assessment in relation to conflict resolution, are discussed in a separate report (available on the INTERACT website (under SMF2) and PROGECTA).

Ecosystem service assessments provide a key mechanism for identifying priority areas for community based monitoring programmes and can provide a baseline for monitoring changes in resource use or availability. It was subsequently agreed that ecosystem service assessments is a key issue when developing the citizen science programme/community based monitoring under WP8.

Tuesday 11 October 2011

Session 5: Retrospective and Prospective vegetation change in Polar Regions: Back to the Future
By Terry V. Callaghan, Royal Swedish Academy of Sciences.

Terry introduced the IPY - Back to the Future (BTF) project whose aim was to:

a) To assess multi-decadal past changes in the structure and function of polar terrestrial and freshwater ecosystems and environments in relation to diverse drivers of change
b) To assess the current status of polar ecosystems and their biodiversity
c) To permanently record precise locations of old sites

The core work of the project was to identify old datasets and repeat the old assessments to assess change. The result of the project has just been published in a special issue of AMBIO. Identifying old data sets and comparing with new data provided opportunities to detect temporal changes at a vast number of sites. This also greatly contributes to understanding the drivers of change. The continuation of this initiative is therefore considered paramount for our identification and understanding of changes and the underlying causes.

It was discussed whether INTERACT could play a role in the continuation of the project. All agreed that this was an exciting initiative that could also be useful for improving the scientific cooperation between INTERACT infrastructures. It was therefore agreed that INTERACT should approach the people behind BTF to discuss a possibilities for INTERACT to host the BTF project in the future. This will require some thought and will be discussed further at the next INTERACT meeting (February/March 2012).
**Session specific task:**

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<tr>
<th>WP1</th>
<th>INTERACT to host the BTF project</th>
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<td>Terry to contact Craig Tweedie to discuss possibilities of INTERACT hosting the BTF project on the INTERACT website.</td>
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**Session 6: WP4 Transnational Access – feedback**

*By Hannele Savela, University of Oulu, Finland.*

Hannele presented the Transnational Access (TA) work package and principles. The third call with deadline December 15, 2011, will be for summer season 2012 and winter season 2012/2013. For this purpose it would be good if potential applicants could find information on the INTERACT website on when stations are available for TA. Station Managers of the 20 stations offering TA should therefore send information on the period that applicant can apply for TA to their specific station. It is also important that we jointly spread the call to as many potential applicants as possible by including information on our websites and other outreach mechanisms. In this way we hope to attract the best projects to the INTERACT stations and thus improve our knowledge and understanding of the environment and processes in the Arctic.

To get feedback from station managers from the previous two TA calls, participants were divided into four groups. Examples of issues to provide feedback on included: Communication with TA work package, advices from TA board, handling of visitors and reimbursement.

**Group 1**
- Underestimated days for the station (Iceland). Wish to double number of user days.
- Reimbursement had been complex at some stations, while it went smoothly at others.
- Low number of applications and concern that this could result in lower standards of projects. Need for getting the calls out to more researchers, institutions, programmes and networks.
- Feedback system for users of how they have perceived the TA support and administration. This should be made part of the mandatory reporting format.
- The individual TA project reports should be put on the INTERACT website. Both positive and negative reports.
- Concern for the lack of social and economic projects among the applications was raised by some station managers.
- Important to communicate safety aspects to applicants, including means of communication (e.g. satellite phones, VHF, PLB (Personal Locator Beacon), SPOT, etc.)
- Important with easy access to station information. Canadian stations can be seen on website with links to individual stations ([http://www.polarcom.gc.ca/index.php?page=northern-research-facilities&hl=en_US](http://www.polarcom.gc.ca/index.php?page=northern-research-facilities&hl=en_US)).

**Group 2**
- It is an issue that applicants lack knowledge regarding the stations they want to visit. This results in much time being spent by station managers providing information of the station, its surroundings, climate and logistics.
- TA board provide useful advice on projects and logistics enabling managers to select the best projects.
- People often come unprepared to the stations and are sometimes unaware of the local conditions. Applicants must be more proactive in their search for information before asking station manager. Important to guide applicants to website/documents where relevant information can be found to minimise the number of questions from applicants.
- Handbook/manual from each station in English so that applicants know what to expect and can be well prepared for their stay at the station.
- In Russia, logistics and customs can be a challenge and translation may be required.
Group 3
- Problems with timing of application in relation to intensive field periods (avoid calls in hectic late spring and summer periods).
- Important to increase outreach of calls. INTERACT presentation with focus on TA could be made available on the INTERACT website and websites of TA stations. “Arctic Frontiers” (www.arcticfrontiers.com) could be used for spreading the TA calls.

Group 4
- TA worked smoothly for most
- However examples of slow reimbursement (due to bureaucracy in the participating institution). Where a secretariat takes care of reimbursement, fewer problems were experienced.
- Need for more visibility of calls. Get the call out through other networks and programmes (e.g. Arctic Info, IASC, APECS (Jenny Baseman of APECS has a good distribution system), etc).
- Announce TA call in NATURE.
- The INTERACT brochure will increase visibility of stations and TA, so all INTERACT participants should bring it to meetings, conferences, etc.
- Public outreach could be made mandatory for projects to increase INTERACT and TA visibility. This could be made part of the reporting format (e.g. a short popular science paragraph and photos).
- Applications to Russian stations should be encouraged. E.g. by translating first page on TA website into Russian. It is hoped that the new observer stations in Eastern Europe may also lead to more applications to Russian stations.

Plenum discussion:
1. There is a need for a disclaimer for unexpected costs and unexpected situations.
   - Post meeting note: Terry and Hannele have prepared it with help from TA Board and feedback from the SMF2. The disclaimer has been placed on the TA pages of the INTERACT website, to the TA application form, and to the information sheet that the accepted user groups receive.
2. There is a need to reduce travel reimbursement if a group does not use all its granted user days.
   - Post meeting note: This is now included in the information booklet that the accepted user groups receive.
3. Are meals reimbursed in the future and to what extent (max per day)?
   - Abisko does not reimburse for meals during the TA visits. Most other stations do.
4. Cost-based prices for accommodation and meals (if applicable) at stations are needed to claim costs from EU. What should be included in the cost calculation?
   - This was only briefly discussed, and WP4 will send more detailed information and instructions during November 2011, based on experiences from the stations that already have cost-based-prices available.
5. The TA calls should reach more potential applicants. There is a need to identify key players (persons, networks, programmes, organisations, TA Board, station managers, EU supervisor) that can spread the call.
   - Post meeting note: This has been done at WP4, and these key players will be contacted with information material as soon as the TA call opens in the beginning of November 2011.

Work package specific tasks:

<table>
<thead>
<tr>
<th>TA station managers</th>
<th>Station availability for TA applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The station managers of the 18 stations offering TA should send information to Hannele Savela regarding station availability (the period where access can be granted to the station).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WP4</th>
<th>TA reports on the INTERACT website</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WP4 should post incoming TA reports on the INTERACT website. For this purpose, the reporting format could include requests for a short popular science text and photos.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WP4</th>
<th>How to calculate cost based prices for TA reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WP4 will send more detailed information and instructions during November 2011, based on experiences from the stations that already have cost-based-prices available.</td>
</tr>
</tbody>
</table>
Session 7: INTERACT website  
By Susanna Olsson, University of Lund, Sweden.

Susanna presented the INTERACT website. [www.eu-interact.org](http://www.eu-interact.org)

The news section is dependent on input from all INTERACT station managers and partners. News, publications, conferences, meetings etc. relevant for INTERACT should therefore be send to Susanna Olsson.

An RSS news feed format was suggested as a mean for spreading news via other media.

The field station information need to be updated for some stations. This will be done using the information from the Station catalogue that station managers should submit under WP2. INTERACT observer stations are also going to be included on the website.

The website should also include a detailed map for each station. It is suggested that the photos/maps used for the Station catalogue (WP2) can be used for this purpose. AWI should forward incoming photos to Susanna Olsson when these are received for the station catalogue.

Stations should be presented by country if possible, rather than in alphabetical order. There should be link in the text to station websites and institutions. Susanna will look into technical possibilities regarding the ordering of the stations.

Susanna has previously requested photos of all INTERACT stations and surroundings for use on the website. The same photos can be used for the station catalogue. However, not all stations have sent their photos. So, please send photos to Susanna unless you already have done this. Note that Dirk Wagner (WP2) also will request specific photos for the station catalogue.

The website also includes information on Joint Research Activities, Station Managers’ Forum and Transnational Access (TA). TA reports should be made available on the INTERACT website together with INTERACT project reports, meeting minutes, etc.

For the outreach part, it was suggested to show examples of animals and plants from the different stations and photos of the staff.

An e-mail list acting as a dialogue forum is needed; here the station managers e.g. can ask for advice related to station management or scientific issues. There should thus be an e-mail list for a) all INTERACT participants (consortium partners and station managers) and b) station managers only (including observer stations). If this leads to an inappropriate number of mails, we will continuously monitor and evaluate the usefulness of the system.

Work package specific task:

<table>
<thead>
<tr>
<th>WP1 Structure of the INTERACT website (from session 8 below)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The coordinating team should consider whether we should stick to the existing work package structure of the INTERACT website or if we can identify an alternative structure that includes the same elements.</td>
</tr>
</tbody>
</table>
Session 8: WP8 Outreach and involvement of local communities

By Christer Jonasson, Andrew Sier, Jan Dick and Lis Mortensen.

Deliverables:
- Information packages and development of a citizen science programme (December 2012)
- Capturing of traditional and Indigenous knowledge (December 2013)
- Increased cooperation with the University of the Arctic (December 2011)
- Construction of a public website (December 2012)

The session focussed on outreach and the construction of a public website. The session was also supposed to include information about cooperation with University of the Arctic, but unfortunately, this part was cancelled due to illness.

Abisko Outreach website
Christer Jonasson presented the Abisko station public outreach website, Abiskoögat (the Abisko Eye).
www.linnea.com/~ans/abiskoogat/index.html

The presentation was meant as outreach inspiration for other station managers. The site targets local communities and the wider public, and shows what can be done with relatively simple means.

It covers the following topics:
- Home – with information on how climate and environmental change is measured
- Researchers – with information on researchers operating at the station (including name, research field, institution, contact information, project description and other involved researchers).
- About ANS (the station) - including the history of the station, buildings, instrumentation and equipment.
- Dictionary – here some of the most used research terms are explained.
- Photos – with a few photos of the area.
- Contact information – for the station and local authorities

Research themes are presented on the right side of the web-pages, included are data (graphs) or text describing the research themes.

INTERACT outreach website
Andrew Sier presented the deliverable and the results of the outreach survey.

The aim of the INTERACT outreach website is “To create interactive website pages for inclusion in the SCANNET website with a suite of facilities including mapping, webcams, discussion forums, data access, photographs and popular science articles”

Results of survey
Respondents: 65 respondents from 15 countries.
Geographical distribution of respondents: Predominantly UK (40%), Denmark (17 %), USA (6%), Finland, Russia, Norway, Sweden, Greenland (all 5 %) and 7 other countries sharing the remaining 12 %.
Occupancy of respondents: Researchers (50%), with educators, Science communicator and resource manager accounting for 8% each and school children 6.5 %.

Below are the website components as ranked by respondents.

![Website components graph]

It was very important for WP8 (and WP1) to stress that the website only stays active if we all contribute. Station Managers can help by:

- Promoting the INTERACT website
  - Link from your own website
  - Link to INTERACT website from your e-mail signature
- Following us on Twitter & Facebook
- Sending news to the WP1 (website responsible, Susanna Olsen) and to WP8 (Andrew Sier), including
  - Results of research
  - TA visits
  - Events
  - Developments & observations at the sites
- Providing resources, e.g.:
  - Photos
  - Video
  - Audio
  - Relevant web links

Plenum discussion
The language of the INTERACT website was discussed. It was agreed that the coordinating team and WP8 would discuss possibilities of having the front page (HOME) of the INTERACT website and TA calls in other languages (e.g. to attract more Russian applicants to TA calls).

INTERACT is on Twitter and Facebook. However, these social media are of little interest to station managers, but could be an outreach mechanism to reach other target groups. It was suggested that WP8 contact marketing experts to get their view on how to identify and reach the target group we want to reach.

There was some discussion related to the structure of the existing INTERACT website. The structure today follows the structure of the work plan (work packages) and there was some concern about the usefulness of
this (e.g. as several components have outreach elements). It was left to the coordinating team to consider whether we should stick to the existing structure or if we can identify an alternative structure that includes the same elements.

WP1 and 8 need help to promote and keep the INTERACT website active. INTERACT participants should therefore send news and INTERACT related activities to Susanna Olsson. It is also important that Station managers react to requests for information (photos, videos, relevant links, etc.) to make the INTERACT website an interesting place to visit.

Susanna Olsson (WP1): Susanna.olsson@nateko.lu.se  
Andrew Sier (WP8): arjs@ceh.ac.uk

<table>
<thead>
<tr>
<th>Work package specific tasks</th>
</tr>
</thead>
</table>
| **WP8** | **Identify target group/user group**  
WP8 is encouraged to identify priority target groups for the INTERACT outreach website, e.g. by contacting marketing experts. |
| **WP1 and WP8** | **Language of key INTERACT website pages**  
WP1 and WP8 to discuss possibilities of having the front page (Home) of the INTERACT website and TA calls in other languages |

**Added Session: Preparation for Joined Workshop 12 October 2011**

*Adjustment to agenda (Tuesday 11 October 2011):*

Discussion of INTERACT opportunities in relation to international workshop on biodiversity – how to identify synergies and areas of potential co-operation within the field of stakeholders in arctic terrestrial biodiversity.

- INTERACT can act as a one stop shop for access to the network and local communities.
- The INTERACT network can function as an emergency response team if there is a need for urgent action to collect samples from a vast number of sites to assess the effects of extreme events, accidents, etc.
- INTERACT can host summer schools for young scientists (to fill gaps in expert capacity, e.g. taxonomists)
- The INTERACT network agreed to host the Back to the Future project. The Arctic Council could decide to endorse the project, which would make it part of their monitoring plans and potentially contribute with funding for specific monitoring activities.
- INTERACT can provide a platform for international programmes and projects that need e.g. circumarctic geographical coverage, gradients, etc. INTERACT could for example play a role in CBMP’s Terrestrial Biodiversity Monitoring Plan and provide a platform for the studies included in the ISAC science plan. We could cooperate on education programmes and workshops.
Wednesday 12 October 2011

Please see separate report from the workshop “Understanding Biodiversity Changes and Causes”.

Thursday 13 October 2011

Session 9: Conclusions from Joint Workshop
By Terry V. Callaghan, Royal Swedish Academy of Science.

The joined workshop was held in a positive and constructive atmosphere and there was a great willingness to work together and improve coordination among participating organisations, programmes and projects. This is needed to reduce redundancy and ensure efficient use of our resources. The following topics were discussed:

Endorsement by Arctic Council
Terry raised the question: Would INTERACT want to seek endorsement by the Arctic Council? Since INTERACT is a project, it would have to be SCANNET, which is the permanent network. It would mean a heavier administration and bureaucracy, but may also be a source of funding and contact to a larger network of researchers. It was concluded that it is important to be visible in the Arctic Council, but that it was too early to be endorsed. The INTERACT network should continue to build strong ties to the Arctic Council programmes and focus of further develop and strengthening the network. A potential endorsement by Arctic Council should be taken up at a later stage.

Cooperation with CBMP:
It was decided that INTERACT should seek a MoU with CBMP to work together. At the Joint Workshop it was agreed that a CBMP/INTERACT task force should be formed to identify synergies and initiate collaborations. This task force should:

- Discuss the potential of INTERACT to function as a site-based component of the CBMP Terrestrial Monitoring Plan
- Consider whether the BTF project could be a joint INTERACT/CBMP programme. It was agreed that Terry should contact Craig Tweedie to get his approval before we approach CBMP regarding this.

Both the CBMP TEMG monitoring plan and INTERACT (WP8) includes a community based monitoring component. As CBMP TEMG is to be co-led by the same institution responsible for WP2 under INTERACT, it was agreed that Elmer would initiate discussions with CBMP and include WP8 in the communications.

Cooperation with ISAC
INTERACT and ISAC are close to finalising a MoU on working together. INTERACT offers a conceptual framework for studying gradients in relation to biodiversity and resilience. This is a study field INTERACT and ISAC could develop together and a workshop was identified as a good start-up mechanism for a joint initiative. WWF (Martin Sommerkorn) also supported this idea.

The future cooperation among programmes and networks
It was agreed at the Joint Workshop that the synergy group (with representatives from the major programmes) should continue as a forum for develop the cooperation between parties (under the name Arctic Biodiversity Consortium, ABC). The group should describe how the programmes will work together and act to implement cooperation on the synergies identified at the workshop. The report from the Joint Workshop includes examples of synergies.

When further strengthening this cooperation it is important that we (in INTERACT) are proactive and come up with suggestions. When making suggestions it is OK to be selfish. It is about finding synergies, so joint initiatives are most likely to be fruitful if all interested parties gain from it. These suggestions should be put forward to the INTERACT representative in the synergy group/Arctic Biodiversity Consortium (at present this person is Terry V. Callaghan).
Session 10: WP2 report concerning ‘Research and monitoring carried out at INTERACT sites’
By Elmer Tøpp-Jørgensen, Department of Bioscience, Aarhus University, Denmark.

Deadline for deliverable: March 2014.

Elmer presented the deliverables which include a survey of research and monitoring carried out at INTERACT stations from 2000 and a description of best practises for selected parameters. Due to time constraints, it was decided to keep the entire session in plenum. A hand-out document with information from the INTERACT work plan, SMF 1 minutes and examples of other project data bases was handed out prior to the session.

Comments from plenum:

Survey on research and monitoring projects at INTERACT sites
- It is very important to keep it simple. Too detailed will mean that it requires much effort from Station managers to find information and contact researchers.
- It is important to consider what the information will be used for and ensure that the effort expected from the station managers is in line with that.
- Differentiate between research and monitoring template for the survey.
- It is important that we agree on a format/template that can be used in the future. If individual stations make sure that the topics of the template are covered in their application system, it will be easy to include future projects in the database. This is also important to consider in relation to TA, where this information (template information) also should be included in the application form.
- WP8 commented that this could be relevant for their work, which includes identification of international standards (related to setting up GIS based system for tracking research and monitoring activities in the field), and it was agreed that WP2 and WP7 should meet to identify synergies later in October 2011.

Best practises for selected parameters
- Select parameters from existing international programmes (ITEX, CALM)
- Select parameters and methodologies from INTERACT Joint Research Activities.
- Link to existing description of best practises for the selected parameters
- Photo recordings could be selected as an easy-to-implement methodology for surveying snow cover / vegetation changes in a standardised way across sites.
- Include contact information for different methodologies for station managers if they need advise on implementation.

Session 11: Joint Research Activities

11.1 WP5 Virtual Instrumentation
By Philippe Bonnet, IT University, Denmark.

Philippe described the deliverables of the work package, which focuses on in situ sensing:
- Automatic observations to replace manual observation
- Transforming stand-alone devices into a network of system monitored and controlled for better performance.

Examples:
- Systems for automatic phenology registration (fixed photo and computer programming),
- Wireless transfer of data from field to scientist via a) static links or b) opportunistic links (e.g. data mules (mobile phones)).
There was a discussion of establishing links between measuring stations (WP6), research stations and the outside world. Philippe explained that there was no budget for this, but that he would be happy to contribute with knowledge upon request. Links from research stations to the outside world is the responsibility of the stations themselves.

Test of connectivity around stations (map shown in presentation) could also be used in relation to communication instructions for visitors (can help identify communication blind spots e.g. for VHF signals).

Philippe asked if this was in line with what was expected from the network. Everyone agreed that it complied with the expectations.

11.2 WP6 Extending and integrating measurements of feedback mechanisms
By Torben Røjle Christensen, University of Lund, Sweden.

Torben presented the deliverables:

**Objective 1:** The main objective of this RTD WP in INTERACT is to improve monitoring and facilitate research into key climate feedback mechanisms from northern terrestrial ecosystems in a changing climate.

**Objective 2:** Quantify interactions of snow/ice, temperature, moisture and exchanges of energy and CH4/CO2 and their intra- and inter-annual variabilities at multiple sites.

**In practice:**
- Improvement of ICOS related measurements at relevant INTERACT platforms
- Establishment of a number of energy exchange stations – “ICOS light” style
- Ensure online data quality check capability and data streaming possibilities

The measurement of feedback mechanism under INTERACT is closely linked to top-level research initiatives, e.g. DEFROST and ICOS.

Sites for setting up measuring stations were selected on the basis of the INTERACT description of work and recommendations by climate modellers:
- Spread out in climate space
- Avoid physical boundaries
- Avoid too mountain peaks and sides and stay in lowland
- Preference to sites with other information available and data being gathered

Equipment has now been installed at Abisko, Zackenberg, Nuuk and Svalbard.

There was an interest from some station managers to know what type of equipment was considered best practise since they were going to set up similar systems. Torben replied that there is no agreed best practise and that they are still developing the methodologies. They are, however, happy to share information with station managers upon request. It was proposed that contact details for experts within specific research fields could be posted on the INTERACT website.

Torben commented that they unfortunately had included too little money in the INTERACT application to cover travel expenses in connection to the implementation of the equipment at the field stations. The group continues to find its way around it to fulfil the deliverable.
11.3 WP7 Data management
By Tomas Thierfelder and Sofia Bryntse, Swedish University of Agriculture, Sweden.

Tomas presented the deliverable and the purpose of designing a tool for tracking research and monitoring activities at Abisko. Within WP7, a blueprint of a GIS management tool will be developed for Abisko, but it is the vision that the system should be used by all stations across the Arctic. This will require meta data regarding activities, common standards and procedures (and further identification of funding).

Several of the deliverables have synergies with work package 2:
- Station catalogue: description of stations that should be available on the web, and this may help to identify a set of stations that can contribute to the identification of a common standard.
- Research and monitoring survey (database): a shared format for gathering project information will be a key issue if the GIS management tool should be implemented across INTERACT stations.
- Best practices of station management: To ensure an updated project database and the possible implementation of the GIS tool across INTERACT stations it is important to describe a recommended common procedure in the best practise report.

It is therefore suggested that WP2 and 7 work together to focus on synergies and reduce redundancy.

Also since this information relates to outreach and the INTERACT website, WPI and 8 should be included in the communication.

Session 12: Closing remarks
By Station Managers’ Forum Chair Morten Rasch, Department of Bioscience, Aarhus University, Denmark.

“I would like to thank all of you for your active participation and constructive discussions and ideas that were put forward during all four days. We have achieved a lot in relation to the work plan and deliverables in a nice setting and a wonderful atmosphere where it is instantly felt that we are becoming a closer group of friends. Bringing good people together and developing friendships are the essential components of the functioning of the network. Combined with the enthusiasm brought in by participants really makes INTERACT a strong and unique platform for research and monitoring in the Arctic.

The workshop co-hosted by INTERACT, IASC and CBMP was held in good atmosphere. I personally found it a very interesting day and I am sure that when we in some time look back it will be thought of as a day to be remembered. We brought together the major players involved in research and monitoring of arctic biodiversity and were able to identify specific areas for collaboration. This means that we are now moving from years of talking about cooperation to actually working together to achieve common goals.

To reduce travel costs, the next Station Managers’ Forum meeting will be held at Svanhovd, Kirkenes, in Norway from 27 February to 1 March 2012 in connection with the INTERACT annual meeting.

It has been some long days packed with activities. I want to thank you all for contributing to this inspiring and pleasant atmosphere, and I feel that INTERACT is constituting itself as an important network in the Arctic, and now also alpine areas of the world. And best of all, I feel part of a group of really good friends.

I look forward to seeing you at Svanhovd in Norway and hope that you all have a safe trip home.”
Appendix 1. SMF 2 agenda

Agenda
INTERACT Station Managers’ Forum 2
Sonnerupgård Gods, Hvalsø, Denmark
10-13 October 2011

Day 1

Session 1
09.00 Introduction
  a) Opening statement and Expected results of SMF2 (Morten Rasch) (10 min)
  b) Introduction of participants (20 min)
  c) Introduction of Agenda and practicalities (Elmer Topp-Jørgensen) (5 min)
  d) Presentation of Station Managers’ Forum deliverables including overview of activities and timeframe (Elmer Topp-Jørgensen) (10 min)
09.45 News from the INTERACT Secretariat (Terry Callaghan/Margareta Johansson)

Breather 1
10.00 INTERACT Research Facility presentation – Toolik Field Station, Alaska, USA (Brian Barnes/Syndonia Bret-Harte)
10.30 – 11.00 Coffee

Session 2
11.00 WP2 - Report concerning ‘Abilities of the INTERACT stations’ (AWI, Hugues Lantuit)
  a) Presentation of draft report (30 min)
  b) Initial comments from SMF participants (20 min)
  c) Presentation of plan for finalising report (print) and updating website station catalogue (10 min)

Breather 2
12.00 Who is who in polar research (AWI, Hugues Lantuit) (30)
12.30 – 13.30 Lunch

Session 3
13.30 WP2 - Report concerning ‘Best practises of Station Management and Administration at Arctic Research Infrastructures’ (Elmer Topp-Jørgensen)
  a) Presentation of deliverable (15 min)
  b) Discussion of topics to be covered by report (in break out groups) (40 min)
  c) Presentations from break out groups and discussion (in plenum) (25 min)
  d) Discussing the way forward: How do we identify best practises (in plenum) (10 min)

15.00 - 15.20 Coffee

Breather 3
15.20 Associated research station presentation - Krkonoše National Park, Czech Republic (Jaroslav Andrle) (10 min)

Session 4
15.30 Ecosystem Services delivered by INTERACT stations (WP8) (NERC, Jan Dick)
  - Survey of ecosystem services delivered by individual INTERACT stations (to be completed during SMF2).
17.30 End of Day 1

18.30 Dinner
Day 2
08.25 Welcome and practicalities of Day 2 (Elmer Topp-Jørgensen)

Session 5
08.30 Retrospective and Prospective Vegetation Change in the Polar Regions: Back to the Future (Terry V. Callaghan) (15 min)

Session 6
08.45 WP4 Transnational Access – feedback (OUULU, Hannele Savela)
  a) Current status of Transnational Access, plus intro to break out discussions (30 min)
  b) Break out group discussions (30 min)
     - feedback and experiences from the first call
     - how to increase knowledge about access possibility and attractiveness of the stations
     - how to encourage use of stations located in Russia and how to encourage Russian scientist to apply TA
  c) Presentation of break out group results (30 min)
  d) Round-up plenum discussion including recommendations for future calls (30 min)

10.30 – 11.00 Coffee

Breather 4
11.00 INTERACT Research Facility presentation – Abisko Scientific Research Station, Sweden (Christer Jonasson)

11.30 - 12.30 Walk in the Park
12.30 - 13.30 Lunch

Breather 5
13.30 INTERACT Research Facility presentation – Zackenberg Research Station, Greenland (Morten Rasch)

Session 7
14.00 INTERACT website (ULUND, Susanna Olsson)
  a) Presentation of the INTERACT website
  b) Comments and suggestions from station managers

14.30 – 14.50 Coffee

Breather 6
14.50 Associated research station presentation – UK Arctic Research Station, Svalbard (Nick Cox) (10 min)

Session 8
15.00 WP8 Outreach and involvement of local communities (NERC, Jan Dick and Andrew Sier; Jardfeingi, Lis Mortensen and Abisko, Christer Jonasson)
  a) Experiences from Abisko station (Abisko, Christer Jonasson) (20 minutes)
     - questionnaire to all participants and discussion (20 minutes)
  b) University of the Arctic present what possibilities they see for interaction (20 minutes)
     - discussion (20 minutes)(CANCELLED due to illness)
  c) Progress of the website and initial results from web-based questionnaire (NERC, Andrew Sier) (20 minutes)
     - questions and discussion (20 minutes)

17.00 ADDED SESSION to discuss synergies between INTERACT and the other circumarctic terrestrial research and monitoring initiatives in preparation for the Joint Workshop

End of Day 2
18.30 Dinner
Appendix 1. SMF 2 agenda

Day 3

Joint Workshop “Understanding Biodiversity Changes and Causes - Synergies in Arctic Terrestrial Biodiversity Monitoring” (INTERACT, CBMP-TEMG, IASC-TEG)

The last decades have seen an increase in research and monitoring activities in the Arctic with the development of several circumarctic, regional, national and local networks, programmes and projects. As part of INTERACT WP3 (International cooperation) we have discussed possibilities of collaborating with a number of these initiatives to join forces and avoid redundancy in our work in trying to fill in the gaps in Arctic Biodiversity research and monitoring.

Background and scope of the Understanding Biodiversity Changes and Causes workshop

With increased focus on climate change over the last decades, the Arctic has experienced a dramatic increase in research and monitoring activities in terms of both scientific disciplines and geographical coverage.

International, regional, national and local actors has initiated projects and programmes to improve our ability to detect changes that allow us to deal with some of the challenging issues that the biodiversity of the Arctic is facing today. There are however still gaps in our knowledge and capacity to fully understand and monitor changes in Biodiversity and predict impacts of a changing climate.

There is some coordination between some biodiversity related projects and programmes in the Arctic, but there is still overlap between different initiatives and possibilities for improved coordination and sharing of knowledge and experiences.

This potential for collaboration on identifying gaps, building capacity and increase coordination of activities within the field of biodiversity was recently discussed between some circumarctic initiatives and it was decided that we would try to bring together some of the players in the field of Arctic Terrestrial Biodiversity Research and Monitoring to identify gaps, synergies and potential areas of collaboration.

Scope of Workshop and output

The purpose of the workshop is:

- to provide participants with an overview of stakeholders in Arctic Terrestrial Biodiversity Research and Monitoring, incl. decision makers, science community, Indigenous Peoples Organisation, and NGOs.

- to ensure that workshop participants have a clear and full understanding of program goals and outputs of Arctic Council initiatives (SAON, CBMP-Terrestrial Expert Monitoring Group, AMAP), IASC Terrestrial Expert Group, ISAC and INTERACT, and opportunities for collaboration within the field of biodiversity.

- to identify knowledge gaps and capacity constraints, and produce a list of recommended activities and topics with potential for collaboration within the field of biodiversity research and monitoring including identification of relevant participants.

Output of the workshop will be a gap and synergies report presenting topics for potential collaboration including identification of networks, organisations, programmes and project and contact persons willing to work together towards common goals (e.g. in the form joint research and monitoring efforts, developing courses and training programmes, Joint Workshops or reports on specific topics, etc.).
Appendix 1. SMF 2 agenda

Day 4

08.30 Welcome and practicalities of Day 4 (Elmer Topp-Jørgensen)

Breather 7
08.35 Associated research station presentation - Czech Arctic Station, Svalbard (Alexandra Bernadová) (10 min)

Session 9
08.45 Conclusions from joint day (Terry Callaghan) (30 min)
- areas of potential collaboration, who to collaborate with and plenum comments

Session 10
09.15 WP2 Deliverable D2.2.1 - Report concerning ‘Research and Monitoring at INTERACT sites’. (Elmer Topp-Jørgensen)
  a) Presentation of deliverable (15 min)
  b) Break Out Groups on Template for monitoring and research project database (20 min)
  c) Break Out Groups on how to identify:
     i. questions needing attention,
     ii. indicators needed to answer questions, including selection of key indicators (max ca 15) and
     iii. best practises for selected key indicators
  d) Presentation of break out groups and round-up (30 min)

10.30-10.50 Coffee

Breather 8
10.50 Associated research station presentation – Aktru Field Station, Russia (Sergey N. Kirpotin) (10 min)

Session 11
11.00 WP5-7 Joint Research Activities,
  a) Status of work packages
     i. Status of Work Package 5, Virtual instrumentation (presentation of goals and deliverables, expected activities and timeline, results of conducted activities, links to other initiatives) (ITU, Phillip Bonnet, 20 min)
     ii. Status of Work Package 6, Extending and integrating measurements of feedback mechanisms (presentation of goals and deliverables, expected activities and timeline, results of conducted activities, links to other initiatives) (ULUND, Torben R. Christensen, 20 min)
     iii. Status of Work Package 7, Data management (presentation of goals and deliverables, expected activities and timeline, results of conducted activities, links to other initiatives) (SLU, Tomas Thierfelder, 20 min)

12.00 – 13.00 Lunch

13.00 WP5-7 Joint Research Activities (continued),
  b) Identification of synergies and input needed from Station Managers. Break out groups discussions based on synergies identified during joint day with CBMP/IASC and discussion of potential synergies between work packages 5-7 and ongoing activities at research stations (WP leader chair relevant break out group and identify rapporteur) (60 min)
  c) Presentations in plenum of break out group results and questions from plenum (45 min)
  d) Conclusions (on synergies and the way forward by WP5-7 leaders, 15 min)

Session 12
15.05 Evaluation, ideas for up-coming Station Manger Forum Meetings and closing remarks (Morten Rasch)

End of SMF 2
Appendix 1. SMF 2 agenda

End notes

1. Theme of INTERACT Research Facility presentations
During the Station Managers’ Forum meetings we will have presentations of research stations in the INTERACT network. The presentations will include general information on the stations and a specific theme that is selected for each Station Managers’ Forum meeting.

The theme for SMF2 will be “Best practises for Monitoring”. This theme has been selected as we have arranged a joined workshop together with CBMP-TEMG and IASC-TEG on Biodiversity monitoring as part of the SMF2 meeting.

2. Associated Research Station presentations
A number of research station has expressed an interest in participating in the INTERACT network. This is a great opportunity to expand the INTERACT station network to share knowledge and improve cooperation in Arctic terrestrial research and monitoring. At present, six stations are interested in participating in Station Managers’ Forum meetings as observers (no voting rights). Three of these stations will participate in the Station Managers’ Forum meeting 2 and to welcome them in the network, we have invited them to give a short (10 min) presentation of their station.

<table>
<thead>
<tr>
<th>Station name (* pending formal agreement)</th>
<th>Country</th>
<th>Contact name</th>
<th>e-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALPFOR Furka Pass</td>
<td>Switzerland</td>
<td>Christian Körner,</td>
<td><a href="mailto:ch.koerner@unibas.ch">ch.koerner@unibas.ch</a></td>
</tr>
<tr>
<td>Karkonoski Park</td>
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## Appendix 2. SMF2 Participants List

### INTERACT – Station Managers’ Forum II

**Sonnerupgård Gods, Hvalsø, Denmark**  
**10-13 October 2011**

### List of Participants

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