

INTERACT II

Station Managers' Forum II

*University Centre of Svalbard
and
Czech Research Station*



20-25 October 2017, Longyearbyen, Svalbard

Contents

To do list resulting from the INTERACT II Station Managers Forum II	3
Agenda for the INTERACT II Station Managers Forum II	5
1. Opening of INTERACT Station Managers' Forum III	6
2. Street View of INTERACT stations (Mapillary) (Task 3.1)	6
3. Template for video-clips of INTERACT Stations (Task 3.1)	6
4. Awareness of the scene (Task 3.2)	6
5. First class science support / Practical field courses for station managers (Task 3.3).....	7
6. First class science support/Mentoring (Task 3.3)	7
7. First class science support/'Open floor' (Task 3.3).....	8
8. Fieldwork Planning Handbook (Task 3.4)	9
9. Reducing environmental impacts of station operations (Task 3.5).....	9
10. INTERACT GIS (Task 3.6)	9
11. Closing of the meeting.....	9
Appendix I: Participants in the INTERACT II Station Managers Forum II.....	11
Appendix II: Results of break out groups related to Enhanced Field Work Preparation Handbook and Field Guide	14

To do list resulting from the INTERACT II Station Managers Forum II

Task 3.1:

- Finalise street view guide and prepare test at SMF III (Morten Rasch, Elmer Topp-Jørgensen and Peter Neubauer)
- Investigate if street view photos can be shown on INTERACT GIS (Tomas Thierfelder and Peter Neubauer)
- Draft video template for discussion at SMF III (Fiona Tummon and Gerlis Fugmann)

Task 3.2:

- Finalise networks survey (Terry Callaghan, Morten Rasch, Elmer Topp-Jørgensen and Chloe Davies) and present analysis of the survey at SMF III (to enable discussions of where INTERACT should be represented and how we achieve this).
- Draft template for standard description of networks/organizations on their respective websites and identify how this can be distributed and by whom (Terry Callaghan, Chloe Davies, Morten Rasch and Elmer Topp-Jørgensen)

Task 3.3:

- UNIS to consider if safety course workshop could be held as part of SMF III (Fred Hansen, Jørgen Skafte, Ann Christin Auestad).
- Bulletin board to be developed (Luisella Bianco, Wojciech Piotrowski, Elmer Topp-Jørgensen)
- Pool of expertise themes and persons, to represent these, to be drafted and discussed at SMF III (Morten Rasch and Elmer Topp-Jørgensen)
- Daily Management Group (DMG) to consider the use of Facebook groups for outreach (DMG).
- SMF to continue dialogue with COMNAP and ARICE (Morten Rasch and Elmer Topp-Jørgensen).

Task 3.4:

- Finalise contents list of book publications to be discussed further at SMF III (Fiona Tummon and Gerlis Fugmann)
- Draft template for video presentation of INTERACT stations after survey among user community about information needs (Fiona Tummon and Gerlis Fugmann)

Task 3.5:

- Plan workshop using SMF input from kick-off meeting and possible survey of existing environmental impact reduction efforts at stations (Nighat Johnson-Amin, Johnny Gaelens, Morten Rasch and Elmer Topp-Jørgensen)
- Draft list of contents for report on reducing environmental impacts (Nighat Johnson-Amin and Johnny Gaelens)

Task 3.6:

- Consider potential INTERACT GIS session at SMF III and identify test stations for implementation (Tomas Thierfelder, UMU IT, Morten Rasch and Elmer Topp-Jørgensen)

Agenda for the INTERACT II Station Managers Forum II

Monday 23 October 2017 Station Managers' Forum

- 09:00-09:15 Welcome and agenda
Morten Rasch
- 09:15-09:30 WP3 tasks and progress since last meeting
Morten Rasch, Elmer Topp-Jørgensen
- 09:30-09:40 Mentorship schemes
Elmer Topp-Jørgensen
- 09:40-10:00 Street view results and manual comments
Elmer Topp-Jørgensen
- 10:00-10:30 Customized video clips of INTERACT stations
Gerlis Fugmann
- 10:30 – 11:00 *Coffee*
- 11:00-12:00 Reducing environmental impacts of station operations
Nighat Johnson-Amin
- 12:00-13:30 *Lunch at UNIS*
- 13:30-15:15 General Arctic fieldwork safety course
Fred Hansen
- 15:15-15:30 INTERACT GIS - how to get on board
Morten Rasch, Elmer Topp-Jørgensen, Tomas Thierfelder
- 15:30-16:00 *Coffee*

Wednesday 25 October 2017 Station Managers' Forum

- 09:00-10:30 Enhanced Fieldwork Preparations – defining the list of contents
Gerlis Fugmann
- 10:30 – 11:00 *Coffee*
- 11:00-11:45 Open floor – mentorship scheme
Elmer Topp-Jørgensen
- 11:45-12:00 Any other business
Morten Rasch

1. Opening of INTERACT Station Managers' Forum III

By Morten Rasch

The INTERACT Station Managers' Forum II (SMF) was opened by Morten Rasch. A quick overview of tasks and deliverables of relevance to station managers was given to the 67 participants, who represented 42 stations.

2. Street View of INTERACT stations (Mapillary) (Task 3.1)

By Peter Neubauer

The Mapillary platform was presented along with current features and features under development. The INTERACT camera setup was discussed, including resolution, options for infrared or near-infrared photos. Recognition features are in place for city infrastructure, while a crowd based recognition tool is under development. This could be useful for scientific purposes (e.g. recognition and counting of animals in photos). Blurring of persons is also done using a recognition tool, and it is possible to request additional blurring or removal of blurring where this is relevant. Options for getting the Mapillary Street View on INTERACT GIS were also discussed (to be discussed further between WP3 task leaders).

3. Template for video-clips of INTERACT Stations (Task 3.1)

By Fiona Tummon and Gerlis Fugmann

The task of producing a template for video presentations of INTERACT Stations was presented and discussed in plenum. The videos are meant as a marketing tool for the stations and the target group for the video presentations is scientists looking for relevant stations for their research. It was suggested that APECS (Association of Polar Early Career Scientists) ask what information young scientists would like to have in such a video, to guide the development of the template. It was also agreed that WP2 and WP3 should consider possibilities for common branding using e.g. similar intro/outro.

Examples will be made from selected stations. Stations are welcome to contact the task leaders if they are interested in participating in making such pilot video clips.

4. Awareness of the scene (Task 3.2)

By Terry V. Callaghan

Major arctic and global organisations were presented with information and discussion of INTERACTs representation herein. Hereafter results of the INTERACT network survey was presented showing that INTERACT station are represented in more than 100 networks/organisations/etc. Stations that still not have responded on the survey were encouraged to do so. The task leaders will identify details regarding all networks and organisations (e.g. geographical coverage, disciplinary coverage, time, database etc.) to enable targeted analysis of the results and to consider where it is important that INTERACT is represented and ensure that stations are linked to relevant scientific

networks. Based on the survey, it is therefore important to consider for each organisation whether it is INTERACT as a network or the stations themselves (or associated scientists) that should be the member.

It has been a jungle to find relevant information about all the networks and organisations, and it is suggested that INTERACT could try to draft a template for recommended information to be easily found on networks/organizations webpages. This template could potentially be recommended by IASC or another international organization. INTERACT could help to distribute the template to the wide list of networks and organisations identified in the INTERACT network survey.

It is important that INTERACT identifies networks/organisations where we want to be represented and discuss how we secure that (both where INTERACT is the member and where stations are the members).

5. First class science support / Practical field courses for station managers (Task 3.3)

By Fred Hansen, Ann Christin Auestad and Jørgen Skafte

An overview of UNIS and its activities were given and course contents for courses currently being developed for station managers (not part of the INTERACT training courses) were presented:

UNIS offers a safety workshop (early 2018) for station managers that also will be used to focus practical summer and winter courses which will also be offered to INTERACT station managers during 2018. The UNIS courses held during INTERACT meetings are thematic theoretical courses.

Hereafter UNIS conducted a basic arctic field safety course and showed procedures, facilities and equipment available at UNIS.

6. First class science support/Mentoring (Task 3.3)

By Luisella Bianco, Wojciech Piotrowski and Elmer Topp-Jørgensen

INTERACT initiatives related to mentoring were presented:

- Awareness of the scene (SMF Task 3.2)
- Courses for station managers (SMF Task 3.3)
- Pool of expertise (WP2 and WP3)
- Bulletin Board (WP2 and WP3)
- Facebook chat forums (WP2 and WP3)
- 'Open floor' at SMF meetings

'Awareness of the scene' and 'Courses for station managers' were addressed during other sessions and was therefore not discussed in details here.

'Pool of expertise': A survey among the INTERACT community has been conducted to identify the 'pool of expertise' for different scientific disciplines. A similar survey will be conducted for station management themes.

'Bulletin board': For simplicity and to get the process started, the bulletin board will be divided into 'Science questions' and 'Station management questions'. If there is a lot of activity at the site, sub-themes may be developed. It is important that the INTERACT Secretariat link the bulletin board to the pool of expertise, to get responses to questions raised. If e-mails go out to all, it should only be once to avoid spamming mailboxes, and then people can go to the website to follow the dialogue if they are interested. The Secretariat will make sure that e-mail lists are updated and maybe develop a subscribe/unsubscribe mechanism.

'Facebook chat forums': They were considered not to be useful for dialogue between station managers, but could be used as outreach tools, like e.g. the TA Facebook group.

'Open floor': This is time set aside for station managers to share good or less good experiences related to station management, or suggest an issue related to station management to be discussed (e.g. a specific development task at a station) which could be discussed at meetings. These ideas can be suggested by the station managers before the meeting to allow time for preparing discussions. The open floor could also capture suggestions for further discussions during the SMF meetings for discussion at the 'Open floor'.

7. First class science support/'Open floor' (Task 3.3)

By Elmer Topp-Jørgensen

The bulletin board was discussed briefly (see 'Mentoring' section above for conclusions). Themes for the Reducing Environmental Impacts of Station Operations Workshop will be extracted from the kick-off meeting comments. Experiences with working with local communities were suggested as a topic, but will be discussed further at the next SMF meeting.

Surveys are important for producing required and high quality products, and it is therefore important that INTERACT participants respond to these. The SMF coordinators will keep such surveys to a minimum.

Potential surveys in the coming period include:

- Remaining responses to the network survey,
- Survey on drone and sensor use at INTERACT Stations (that can be used to identify recommended basic drone products at stations and a list of sensor types and their uses (see drone workshop report for additional information).
- Survey of equipment, technologies, design techniques, etc. applied at research stations to reduce emissions. For use at workshop and for idea catalogue.

8. Fieldwork Planning Handbook (Task 3.4)

By Fiona Tummon and Gerlis Fugmann

The task was presented and participants were divided into three breakout groups to discuss different sections of a draft list of contents circulated prior to the meeting. Participants circulated to all three break-out groups and hence discussed the entire list of contents. Results of the individual sections were presented in plenum (see Appendix II).

9. Reducing environmental impacts of station operations (Task 3.5)

By Nighat Johnson-Amin (Gigi) and Johnny Gaelens

The task was presented along with a presentation of Princess Elisabeth Antarctic '0-emission station'. The task is planning a workshop on how to reduce emissions and an idea catalogue for station managers working to reduce the emissions of their station. The workshop will be held 21 March 2018 as part of the INTERACT SMF III meeting in Italy (19-23 March 2018). Station managers were already asked at the SMF I meeting about what themes they would like to see covered. The workshop will accordingly focus on specific themes related to station management and will include station managers, industry and others with experience on reducing environmental impact. Station managers are welcome to suggest industry partners that potentially could contribute to the workshop within the suggested themes. The Task leader will then develop a report structure for discussion at the SMF III meeting.

The process for working to reduce emissions will be suggested in the report, which also may include elements like design drivers, legislation, monitoring of emissions, identification of solutions and suppliers. Themes will be identified by the task leader and a survey of good/less good experiences may be conducted prior to the workshop.

10. INTERACT GIS (Task 3.6)

By Tomas Thierfelder

The recent developments in INTERACT GIS was presented including a) the choice of a new system operator to run the system, when it is fully developed (Umeå University IT department – UMU IT), b) estimated running cost scenarios, c) a time plan for the final operational version of INTERACT GIS and d) information about how stations can adapt the system to their specific needs. System development will be finalized using the experiences from current users (Abisko and Tarfala) and will be tested at a number of stations.

11. Closing of the meeting

By Elmer Topp-Jørgensen and Morten Rasch

Elmer Topp-Jørgensen and Morten Rasch thanked for active and constructive participation and informed about the next INTERACT Station Managers' Forum which will be held in northern Italy from 19 to 23 March 2018. Station managers and work packages leaders

were encouraged to use the SMF platform for getting input or discussing issues of relevance to their deliverables (also to ensure that the products are useful for implementation by station managers). The meeting was closed.

Appendix I: Participants in the INTERACT II Station Managers Forum II

Surname	Name	Partner	Institution	Email
Ader	Maria	40-AF	ÅF Technology AB	maria.ader@afconsult.com
Auestad	Ann Christin	46-UNIS	University Centre in Svalbard	ann.auestad@unis.no
Barnard	Christine	29-CEN	CEN - Centre d'études nordiques (ULaval)	christine.barnard@cen.ulaval.ca
Beckmann	Katharina	01 –LU	Lund University	katharina.beckmann@nateko.lu.se
Bendz	Eskil	40-AF	ÅF Technology AB	eskil.bendz@afconsult.com
Bernardova	Alexandra	11-USB	University of South Bohemia	alex.bernardova@gmail.com
Bianco	Luisella	06-CLU	CLU SRL	luisella@cluweb.it
Bret-Harte	Syndonia	32-UAF	University of Alaska Fairbanks	msbretharte@alaska.edu
Callaghan	Terry	02-USFD	University of Sheffield	terry_callaghan@btinternet.com
Cohen	Sara Mollie	46-UNIS	University Centre in Svalbard	Sara.Cohen@UNIS.no
Elster	Josef	11-USB	University of South Bohemia	jelster@butbn.cas.cz
Ericson	Tor	40-AF	ÅF Technology AB	Tor.Ericson@afconsult.com
Fugmann	Gerlis	36-UIT	Association of Polar Early Career Scientists / UiT The Arctic University	gerlis.fugmann@apecs.is
Gaelens	Johnny	44-IPF	International Polar Foundation	jgaelens@polarfoundation.org
Gíslason	Ó. Sindri		Southwest Iceland Nature Research Centre	sindri@natturustofa.is
Godøy	Øystein	41-METNO	Norwegian Meteorological Institute	o.godoy@met.no
Guldahl	John Erik	COMNAP	COMNAP	guldahl@npolar.no
Gustafsson	Tomas	40-AF	ÅF Technology	tomas.c.gustafsson@afconsult.com
Hansen	Fred Skancke	46-UNIS	University Centre in Svalbard	fredh@unis.no
Hansen	Jannik	05-AU	Aarhus University	jaha@bios.au.dk
Heiring Juelsbo	Nanna	Observer	Skálanes station	nanna@skalanes.com
Hertz	Cecilia	39-UD-AB	Umbilical Design	cecilia.hertz@umbilicaldesign.se
Hutton	Elina	15 –UH	University of Helsinki	elina.hutton@helsinki.fi
Hyvärinen	Pekka	20-LUKE	Natural Resouce Institute Finland LUKE	Pekka.Hyvarinen@luke.fi
Jennings	Inger	46-UNIS	University Centre in Svalbard	logistics@sios-svalbard.org
Johansson	Margareta	01-LU	Lund University	margareta.johansson@nateko.lu.se
Johnson-Amin	Nighat	44-IPF	International Polar Foundation	gg@polarfoundation.org

Surname	Name	Partner	Institution	Email
Jokinen	Mikko	20-LUKE	Natural Resource Institute Finland LUKE	mikko.jokinen@luke.fi
Kolesnikova	Tatyana	10-TSU	Tomsk State University	kirpota@inbox.ru
Kristjansdottir	Hanna Maria	33-SSLC	Sudurnes Science and Learning Center	hanna@thekkingarsetur.is
Kroon	Aart	03-UCPH	Copenhagen University	ak@ign.du.dk
Larmanou	Eric	23- SLU	Swedish University of Agricultural Sciences	eric.larmanou@slu.se
Lárusson	Kári Fannar	35-CAFF	CAFF	kari@caff.is
Leppänen	Leena	34-FMI	Finnish Meteorological Institute	leena.leppanen@fmi.fi
Longan	Sara		Alaska department of National Resources	slongan@blm.gov
Mathiesen	Svein	47-ICR	The International Centre for Reindeer Husbandry	svein.d.mathiesen@reindeerc entre.org
Maximov	Trofim	21 - IBPC	Russian Academy of Sciences - Siberian Branch	tcmax@mail.ru
Mortensen	Lis	27- JF	Faroe Islands Nature Investigation	Lis.Mortensen@jardfeingi.fo
Neubauer	Peter	45-MAP	Mapillary	peter@mapillary.com
Olsson	Susanna	01-LU	Lund University	susanna.olsson@nateko.lu.se
Óskarsson	Hlynur	42-AUI	Agricultural University of Iceland	hlynur@lbhi.is
Paavola	Riku	04-OULU	University of Oulu / Oulanka research station	riku.paavola@oulu.fi
Pedersen	Christina	08-NPI	Norwegian Polar Institute	christina.pedersen@npolar.no
Penn	Henry	38-AINA	Arctic Institute of North America	henry.penn@ucalgary.ca
Piotrowski	Wojciech	17-IFS-PAS	Institute of Geophysics, Polish Academy of Sciences	w.piotrowski@igf.edu.pl
Rączkowska	Zofia	30-IGSO-PAS	Institut of Geography and Spatial Organisation PAS, Department of Geoenvironmental Research	raczk@zg.pan.krakow.pl
Rasch	Morten	03-UCPH	Copenhagen University	mras@ign.ku.dk
Raundrup	Katrine	16-GINR	Greenland Institute of Natural Resources	kara@natur.gl
Sabacka	Marie	11-USB	University of South Bohemia in Ceske Budejovice	sabacka.marie@gmail.com
Scarpa	Federica	IASC	IASC	federica.scarpa@iasc.info
Scheepstra	Annette	43- UoG-AC	University of Groningen	a.j.m.scheepstra@rug.nl

Surname	Name	Partner	Institution	Email
Sielski	Wlodek	17-IFS-PAS	Institute of Geophysics, Polish Academy of Sciences	sielski@igf.edu.pl
Skafté	Jørgen	05-AU	Aarhus University	jska@envs.au.dk
Solomin	Yaroslav	26-YSU	Yugra State University	defavod@gmail.com
Sule	Annelie	39-UD-AB	Umbilical Design	annelie.sule@umbilicaldesign.se
Suominen	Otso	18-UTU	University of Turku	otso.suominen@utu.fi
Thierfelder	Tomas	23-SLU	Swedish University of Agricultural Sciences	Tomas.Thierfelder@slu.se
Topp-Jørgensen	Elmer	05-AU	Aarhus University	jetj@bios.au.dk
Þorlákisdóttir	Jónína Sigríður	28-RFS	Rif research station/Icelandic Institute of Natural History	rif@nna.is
Tummon	Fiona	36-UiT	APECS - University of Tromsø	fiona.tummon@apecs.is
Ventura	Stefano	31-CNR	National Research Council of Italy	stefano.ventura@cnr.it
Viitanen	Leena	07-AWI	Alfred Wegener Institute	leenakaisa.viitanen@awi.de
Wikan	Anne Marie	13-NIBIO	Norwegian Inst. for Agricultural and Environ. Research	anne.wikan@nibio.no

Appendix II: Results of break out groups related to Enhanced Field Work Preparation Handbook and Field Guide

Chap. 2: Pre-planning:

Overall the groups that discussed this section felt that the sub-sections should rather be organised around questions. The following suggestions were made:

1. What do you want to do and why?
2. How do you want to do it?
3. Where and when do you want to do it?
4. How do you get there?
5. What will you need and what is already available?

They also suggested:

1. That a point should be made to look at the station webpages, ideally providing links to all INTERACT stations.
2. That an example of a budget is provided

Chap. 3: Preparations at home:

Several points could be added to the various sub-sections:

1. Make sure you have an overview of relevant safety telephone numbers.
2. Look into how isolated the station is. Stress that at very isolated stations you can't buy anything and should therefore bring all your equipment yourself.
3. Provide dietary needs to the station beforehand.
4. Look into what kind of research has been done before at this station.
5. It needs to be clearly informed by station management that you are encouraged to ask questions if you have doubts about equipment etc. Young people sometimes are too shy to do so. However, it needs to be emphasized that telephone contact before a stay at the station is useful for the visitor and the station management.
6. Check what chemicals and supplies for lab work will be available and what you need to bring with you
7. Engaging with local communities needs also to be done before you go on fieldwork, so chapter 6 needs to be included here as well: make sure you have the permission of the local communities if needed
8. Be aware of the services that are nearby the station or not
9. What kind of plugs are there for electricity?
10. Be aware of how your equipment is shipped and stored (inside or outside). Instruments are often shipped long before use and/or long after use.
11. What customs papers are needed? What are the rules at your fieldwork location as

well as in your home country?

12. Be aware of the tasks the station might ask from you (cleaning, cooking etc.).

13. Be aware of the data management requirements.

14. Be aware that you need to be flexible in relation to weather conditions and similar unpredictable conditions and always have a plan B and C...

General points:

- The guidebook needs to be attractive to read and not too long
- The guidebook needs to be up-dated at regular intervals.

Chap. 4 “Preparations at the station” and later chapters:

Two broad themes emerged during discussion of the outline. First, many aspects of the later chapters should be considered also in the planning stages, before arriving at the station. Once you arrive at the station, it is too late to change many things. Second, communication with the station managers should be encouraged throughout the planning process. For example, site selection has to be done in consultation with the station managers, because they are the only ones who know what work is already underway and what areas are available for new experiments or data collection. Site selection may need to be completed in order to obtain permits, which are needed before the work starts. So, throughout the planning process, communication with the station manager is essential.

Specific comments for the chapter on Preparations at the Station:

Add these elements:

- 1) Familiarize yourself with procedures for laboratory work and chemical/hazardous waste disposal. (This also needs to be considered in the planning process, especially as you will likely need to procure your own chemicals and to transport them according to national standards for transport of hazardous materials).
- 2) Understand where you can walk to avoid disturbing other people's measurements and experiments. Station staff will inform you about this.
- 3) Part of establishing good relations with station staff and other visitors is considering how to minimize the impact of your work on others. For example, if you need to sample at night, ask to share a room with others who are sampling at night, or ask for a single room.
- 4) Label your samples clearly with your name, not just plot codes, so that if any are left behind, they can be returned to you.
- 5) Always have a back-up plan.
- 6) Leave enough time in your schedule for weather delays or other unexpected occurrences. Also, leave enough time to pack up at the end of your stay. If you are

too rushed at the end of your stay, you might make mistakes and leave things behind and this negatively impacts other people, as well as yourself.

One small specific comment for the planning chapter: Consider adding an item to bring a basic kit for sampling in your hand luggage, in case your checked luggage is delayed in transit.

Comments on later chapters:

How to behave in the field:

- 1) One person commented that this chapter sounds good on paper, but almost never works in practice. Each station should provide an information meeting at the station once people arrive. As you may not remember all that is said, you should always ask the station manager when you have questions. Station managers are there to help you.

Engaging with local communities and outreach:

- 1) Engaging with indigenous communities needs to be planned ahead of time. It should be addressed already in the planning chapter. Also, contact with communities need follow-up after the research is completed. It is always a good idea to plan a later visit to explain your results.
- 2) Outreach (to communities or others) really happens throughout the research process. It should be considered at all stages. Consider bringing a presentation to share your work with others at the station, in case there is an opportunity. Many stations arrange seminar series at the station for exactly this purpose.

After Fieldwork:

- 1) Add an item to address data storage, data back-up, and submission to data archives.
- 2) In addition to asking the station manager about storage of equipment and shipping of samples after your field work is done, consult about these things ahead of time (in the planning stages), because storage at the station is not unlimited.

Annexes:

- 1) Add a note to check the website(s) for the station(s) that you plan to visit, as there is usually much more detailed information there than is presented in the INTERACT station catalogue.