

EISCAT Norway Meeting

Date: Nov. 25, 2024 13:00-15:00 CET

Attendees: Devin Huyghebaert (DH), Lasse Clausen (LC), Ingrid Mann (IM), Dag Lorentzen, Daria Kotova, Ingeborg Frøystein, Lisa Baddeley (LB), Oliver Stalder, Spencer Hatch, Thomas Ulich (TU), Yaqi Jin, Pål Sørgaard (PS), Juha Vierinen (JV), Björn Gustavsson (BG), Andres Spicher, Martin Flügge

Agenda:

- EISCAT_3D Update - Thomas Ulich
- Update from Norwegian Research Council - Pål Sørgaard
- Update from Norway EISCAT Council Representative - Ingrid Mann
- Update from Norway EISCAT SAC Representative - Lasse Clausen
- Update on EISCAT Norway Time Allocation - Lisa Baddeley
- Other Discussion Topics

Minutes:

Thomas Ulich – Update on EISCAT & EISCAT 3D

Update on EISCAT_3D – Solutions for noise in transmitters and receiver issues are found and being implemented. There is some groundwork that needs to be done at Skibotn, but the EISCAT_3D electronics can be installed before/during the work.

EISCAT 3D User meeting December 3-4, 2024 - https://www.space.irfu.se/workshops/EISCAT-3D_User2024-2/

Viktoria Mattsson will give presentation on EISCAT AB on December 4 @ 8:30 CET

Pål Sørgaard – Update on EISCAT AB

– How the associates will relate to the company and between themselves including some of the policies that are changing

- The new company has been established – Norway, Sweden, Finland have different traditions for board members – Norway does not put government employees on the board. 2 board members from Norway have educational/academic experience previously

- The company board will not have researchers included. The company board is a new company role that is not in the current EISCAT setup. They will handle many duties that were previously handled by council.

- Viktoria Mattsson will also be on the board of the company (presentation on December 4 @ 8:30 CET as part of EISCAT_3D user meeting). The board will be the decision maker. There will be some topics put forward by the researchers and research councils that will be discussed among associates – the company board will have the final say in matters.

- EISCAT Associates – The Research Council of Norway will be an associate as it is today. EISCAT is now listed among the infrastructures that the research council is instructed to fund. There are only a few infrastructures that are on that list. The research council is obligated to fund EISCAT.

The associates forum is a new thing for EISCAT, and will potentially have to handle some tasks of the current council and administrative and finance committee (AFC). The associates forum is a forum for the funders of EISCAT – affiliates are not associates due to the typically small amounts they contribute. Informally the associates forum is where the money comes from – but decisions will be made by the board of the EISCAT company. The board of company appoints the associates. The associates forum is where the funding and science voices will meet – each associate should nominate two members – one corresponding to science and one corresponding to funding.

There will also be a science advisory committee (SAC). The goal is to have everything as similar as possible compared to how they are today. The SAC will be appointed by the board. There can also be up to 3 external members (external to EISCAT/associates). The goal is to represent the research councils and research community.

For the documents related to associates – Mervyn Freeman has led much of this work. A proposal for the associate agreement has now been made. This will be a template and the hope is that all associates use the same contract between the company and the associates (funders).

Radar access policy – This defines the capacity that will be made available to each associate. There will be a different unit for radar access time with EISCAT_3D. It will be called an EISCAT Access Unit (EAU). What this EAU unit will correspond to in terms of radar time and funding is still being determined. This then allows several experiments at the same time, etc.

The data policy is still undergoing work.

TU: One person from current EISCAT council will be on the EISCAT AB board – Dr. Kati Sulonen from Finland

JV: When is first light of EISCAT 3D?

TU: Hopefully testing will be ramping up this summer

JV: What should we put for user access for EISCAT_3D in funding proposals?

TU: From Autumn 2025 might be okay. The electronics need to be cabled which can take some time.

IM: Is there a timeline?

TU: The plan is to first commission NO-7, and we want to give data from this setup to the users. Commissioning could happen element by element after the first setup – this is still under discussion.

Ingrid Mann gives Status of National Project for EISCAT 3D

- The current EISCAT Norway project ends 31-12-2024
- A final report will need to be prepared in January 2025

- The EISCAT 2025 infrastructure proposal was submitted to Norwegian Research Council November 2023. A good grade evaluation was achieved – only one point lost on the implementation due to uncertainty regarding EISCAT AB when the proposal was submitted. This proposal included a 10 year budget. There was no own/additional financing required in the submission.
- There will be a new EISCAT Norway consortium agreement with all institutes participating in the EISCAT project. The consortium serves as a forum for EISCAT users in Norway. The members of the project board represent the institutions named in the application.
- There are no current plans to continue EISCAT Norway consortium membership from NTNU. It would be valuable to have other institutes involved in the project board membership if people know of anyone interested from Norwegian institutes not yet involved. There is potentially radio science/astronomy or other fields not represented.
- The new consortium agreement will be completed in 2025.

Lasse Clausen update on Science Advisory Committee

- If anyone has any concerns regarding EISCAT AB and other EISCAT science/operations, it is important to contact Lasse Clausen (lasse.clausen@fys.uio.no) or Karl Laundal (karl.laundal@uib.no) about those concerns.
- The SAC is developing a new common programme document for EISCAT_3D. Please contact Lasse Clausen for further information.
- The EISCAT international radar school will occur: 11-15 August 2025
- The EISCAT symposium 2025 will occur: 18-22 August 2025
- There is an EISCAT Heater Group led by Theresa Rexer (theresa.rexer@uit.no) (UiT) – contact Theresa if you are interested in participating.

TU: We (EISCAT) want and need the heater – These are the only ISR/heater conjunction measurements available globally. The EISCAT Heater is old and costs money to repair. It is important to show interest in continuing these measurements from the community.

- Regarding EISCAT AB, there are 3 important SAC recommendations:

- 1) SAC encourages EISCAT to make data embargo times as short as possible. Currently it is a 1-year embargo time. It is possible for experimenters to waive the embargo time for current experiments.
- 2) SAC recommends to keep the individual national procedures for the allocation of radar time. Each associate should be in charge of their own procedure.

IM: Was this also the opinion in Norway for keeping the same procedure?

LC: I suggested that it is good to keep current procedures – others in SAC also agreed.

- 3) SAC is concerned about the status of EISCAT_3D data analysis software. SAC strongly recommends that sufficient resources to facilitate developing the most critical part of the data analysis

chain are assigned. SAC believes that this should come from EISCAT due to the security concerns with external user development of analysis software. Research councils do not typically fund software development without research.

Lisa Baddeley update on EISCAT Norway Time Allocation

EISCAT Norway has moved to a more structured system for time allocation.

Upcoming deadlines for 2025:

- **January 15, 2025** first due date (70% of all time)
experiments during the times of: 1/3/2025 - 31/12/2025

- **Aug. 20, 2025** for second date (30% of Norway time)
experiments during the times of: 1/11/2025 – 28/2/2026

LC: Everyone should schedule their experiments as normal. No one should be worried about scheduling due to the transition of the EISCAT company.

LB: EISCAT engineers have been great about helping with scheduling.

TU: It is very good to show interest in system by scheduling spring experiments now.

LB: It is possible to run experiments to end of January, 2025, for 2024 EISCAT Norway time.

PS: Currently we measure capacity in hours. How will we measure capacity for EISCAT_3D?

LB: Number of hours can be good, but does not always reflect a good measurement. Student involvement is also a good indicator for good use of radar time.

PS: What about capacity in radar operations? Costs in EAU (EISCAT Access Units).

LB: Open data policies may result in more sharing of time and resources. It is still undetermined how it will work once there are shared experiments.

BG: How much power (kWh) per experiment perhaps?

TU: Current radars should keep the current scheduling systems. For now, we only need to worry about the current systems. There is the potential to do fractional hours, but this has to be discussed further. We have some time before operations for users for EISCAT_3D – summer is probably the earliest possible time that user operations might commence.

LB: We will keep the current system for now and we will deal with the new system for EISCAT_3D when it comes online.

No additional topics discussed.

End of Meeting