

EISCAT Scientific Association

Short Report from the 86th meeting of the Council held at the Arctic University of Norway, Tromsø 1 – 2 June 2016

Present: Finland: Dr. A. Aikio, Dr. K. Sulonen, Japan: Dr. H. Miyaoka (Vice-Chairperson), Dr. S. Nozawa, Norway: Prof. A. Brekke, Dr. B. Jacobsen, Dr. L. Lønnum, P. R. of China: Prof. Q. Dong, Dr. Z. Ding, Sweden: Dr. T. Andersson, Prof. J. Gumbel, UK: Dr. M. Freeman and Dr. I. W. McCrea (Chairperson). By Invitation: Mrs. M. Vannas (AFC Chairperson) and Dr. T. Ulich (SOC Chairperson). From Headquarters: Mr. H. Andersson (Head of Administration) and Dr. C. Heinselman (Director).

This Short Report follows the agenda order.

Council related

1. Adoption of the agenda

The agenda is adopted as presented.

2. Approval of the minutes of the 85th meeting

The minutes from the 85th meeting are approved and recognised as a true record of the meeting.

3. Matters arising from the 85th meeting

The publishing of previous years' annual reports still suffers from lack of input from external providers. Council agreed at a previous meeting to, in worst case, simply omit missing pieces so that the reports can be published. The 2010 and 2011 annual reports are being finalised with these omissions and they will soon be published. The Associates still have the possibility to submit material to the 2012, 2013, 2014 and 2015 annual reports.

The new Agreement signing process is progressing. So far three out of six Associates have reportedly signed the new Agreement. The remaining Associates will sign it during the coming months meaning that the new Agreement¹ should come into force before the end of the year.

Reporting

4. Report from the Director

Spares for some parts in the current systems are no longer available for purchase. This relates particularly to the current receiver chains. If further failures occur, replacements will be based on EISCAT_3D technology. The work needed to adapt the

¹ <https://www.eiscat.se/eiscat2014/eiscat-bluebook-edition-2015/view>

systems to handle the new technology will be of the same order as repairing or creating engineering work-arounds for the old hardware.

The shift-work arrangements at Tromsø and Svalbard sites continue to cause concern. Discussions between the staff and their Norwegian host employer, Tromsø University, continue.

5. Report from the Administrative and Finance Committee

The tax/VAT status of the Association was discussed by AFC. Today the Association pays VAT on investments and gets that back from the host countries (Finland, Norway and Sweden – though the refunding mechanism in Finland is not currently not working). With the start of the EISCAT_3D construction this process will involve substantial (140-150 MSEK) transfer of funds, which may, if repayments are delayed, cause cash-flow issues. Ways to avoid this are discussed and Council agrees to have AFC establish a small working group consisting of representatives from Finland, Norway, Sweden and Headquarters to look into the possibilities of either managing the cash-flow or reregistering EISCAT for some other legal status (ERIC, INT), which would be tax-exempted.

6. Report from the Scientific Oversight Committee

The new Agreement states that the scientific committee of the Association will be a Scientific Advisory Committee (SAC). This means that the current oversight committee (SOC) will disappear when the new Agreement is activated. It is not defined how the transition from SOC to SAC will be done. SOC suggests having Council make a decision of how to manage this.

Council concurs and decides, in relation to when the new agreement is activated, to appoint the SOC chairperson at that time as SAC chairperson (until at least the first Council meeting after the agreement activation day) and that the external SOC members at that time shall continue for their full term - then as SAC external members.

The chairperson(s) decision for SAC will also apply for the now ad hoc established AFC (which would be replaced by the formal Administrative and Finance Committee (AFC)) and other possible Council-established committees and groups.

At the SOC meeting held in Finland, Chinese representatives suggested building the previously intended Svalbard 3rd antenna either in Finland or Sweden, but with modifications to transmit and receive 233 MHz so that it can supplement the planned EISCAT_3D system. SOC briefly discussed the scientific benefits at the meeting but concluded that the science merits, especially when so closely coupled with EISCAT_3D, will require much more consideration than first thought.

Council notes the development and asks the Chinese colleagues, with some support from SOC, to elaborate the scientific benefits for the EISCAT community and other users, of integrating the Chinese antenna, with EISCAT_3D compatible transmitter, into the EISCAT set of infrastructure.

EISCAT_3D related

7. Overall (funding) status

The overall funding situation is summarised. Finland, Norway and Sweden have already committed to the project. Japan has not secured full funding yet. A small Japanese budget allocation has been made available for the continued amplifier work. Japan will provide 19 amplifier modules for the PfP project test subarray. The delivery of these modules will be done spring 2017. The UK funding endeavours have progressed further and are now being finally assessed. Both Japan and UK will most probably know their respective funding possibilities before the end of the year. In China, the suggested joining of, and funding for, the EISCAT_3D project was suggested to the next, 13th, five-year plan, which will start in May 2017. The details of the 13th plan will only be known a few months before it starts. This means that the funding possibilities from P. R. of China will earliest be known early spring 2017.

Timing is becoming critical. The Nordic countries have conditioned their funding decisions for a start of the implementation work before the end of 2016. The next Council meeting is scheduled for 2-3 November 2016. If the Japanese and UK funding decisions have not been done then, an extraordinary Council meeting will possibly be needed thereafter. It is generally believed that not all remaining funding decisions will need to be on the table for Council to decide on a go ahead and start the implementation phase.

8. First report of the EISCAT3D_PfP project

The EISCAT3D_PfP (Preparation for Production) project started 1 September 2015 and will continue until the end of August 2017. The project activities are being carried out as project tasks, milestones and deliverables under six work packages (WPs). The WP1 (Project Management), WP2 (Coordination and Outreach) and WP3 (Design Finalization for Critical Subsystems) started at the project start date whereas WP4 (Procurement of Production-Ready Designs and Hardware) started in December 2015. The WP5 (Engineering-level software) and WP6 (Test Subarray Integration and Compatibility Verification) will start in May 2016 and September 2016, respectively. Quarterly newsletters² are published on the project home page to publicise the project activities. The progress of the project so far is summarised. In general, after a slow start, the project is now in full motion and totally five dedicated project staff charge most of their work hours onto the project. Additional staff is allocated to the project depending as needed. Procurement tenders for the test array components will soon be published³.

9. National and supporting activities (e-Infrastructure, sites, etc.)

The EISCAT_3D site locations have been pinned down further and host and EISCAT Headquarters-led activities are ongoing to secure land rights, build permits, etc. The necessary internet and computer infrastructure are also being detailed further. EISCAT_3D will have one operations centre controlling all operations. Specification of

² <https://eiscat3d.se/project/pfp/newsletter>

³ At: <https://www.eiscat.se/tenders>

the required computing resources for control and data handling is challenging, so EISCAT collaborates with experts in this field. Discussions with potential High Performance Computing and Networking (HPCN) centres are ongoing and the Internet requirements are being considered in collaboration with the academic networks in Finland, Norway and Sweden (FUNET, UNINETT and SUNET). The operations centre will use the resources at the chosen HPCN. At least two data centres (physically apart) are planned. The primary one will most likely be co-located with the operations centre HPCN. The other data centre will carry a second copy of the published data.

10. Business model

Various business models have previously been discussed at Council and Associate meetings. Based on these discussions, a suggested model was presented to Council. This model is based on the current one but has some additional features, such as improved statistics reporting, pool reviews, ability to handle further data products and H2020 implementation of calculating time buyer/unit cost hours.

Regular financial matters

11. Annual Report of the Accounts 2015

The 2015 outcome resulted in a positive result of about 2.1 MSEK, most of which comes from additional income. The amount has been put in the surplus fund for later use. Council closes the Annual Report of the Accounts 2015⁴.

12. 2016 Financial development

Council notes the forecast indicating a small deficit for the year. The deficit can likely be absorbed during the year.

13. Budget 2017 and Five Years plan

Council considers the details of the draft budget document and five years plan. The five years plan has deteriorated a bit, when comparing with the situation only six months ago, mainly due to exchange rate fluctuations.

Other matters

14. Data Policy – special care procedures

The EISCAT Statutes include an appendix spelling out the EISCAT Data Policy. That policy indicates areas that require special attention to ensure that EISCAT systems adhere to the goals of the Association, but it does not prescribe detailed procedures for avoiding or handling potentially politically sensitive observations. Those details will be laid down in a procedures document that will be available on-line. A first version of the procedures document is presented to Council. The overall opinion is that it is a good document but needs further assessment by the Associates, in particular Norway, before Council can adopt it.

⁴ Published version: <https://www.eiscat.se/groups/Documentation/Council/annual-report-of-the-accounts-2015/view>

15. Royal Astronomical Society award

The Royal Astronomical Society has decided to honour EISCAT with the 2016 RAS Group Achievement Award (G) at the National Astronomy Meeting in Nottingham, U.K. in late June 2016. The award is given to the EISCAT team (individuals and groups at both past and present Associates). The award includes a certificate for each of the team members. After some discussion, to keep the number of certificates manageable and to avoid the risk of leaving someone out, the suggestion is to have one certificate prepared for each of the groups in each country. Each certificate will be addressed to "The (*country*) EISCAT Community" and will be sent to a contact person in each country plus one to EISCAT directly.

16. Science presentation: Prof. Wang, Chinese national space science center

Prof. A. Brekke gives a presentation titled "From Halde to EISCAT_3D".

Council related

17. Restricted Session

None.

18. Any other business

None.

19. Summary of decisions and recommendations

The agreed decisions and recommendation are summarised (covered in the other agenda items).

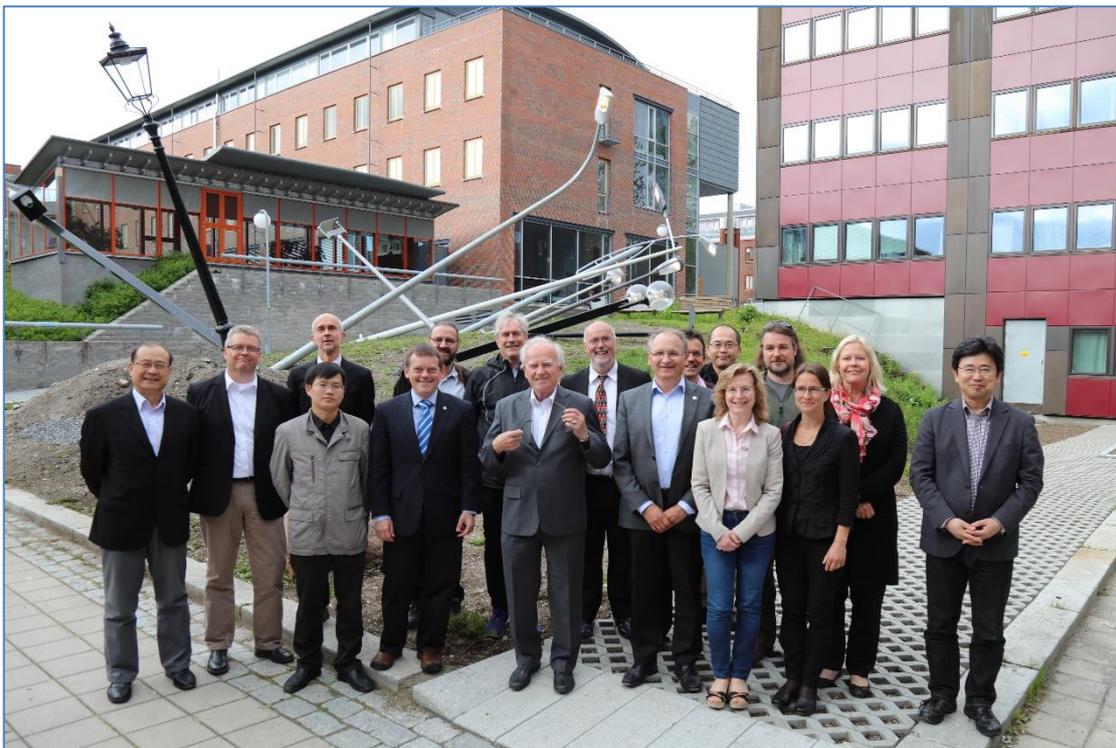
20. Next meeting

The autumn 2016 will be held in UK, tentatively 2 -3 November 2016, in Oxford. The meeting will be organised by NERC.

The next regular meeting, spring 2017, following the UK meeting will be held in Japan. The dates are yet to be confirmed but will preliminary be 31 May – 1 June 2017 and will be organised and held at NIPR, in Tokyo. This meeting will follow onto other EISCAT meetings already scheduled in the Tokyo area meaning less travel for those already being in Japan.



Intense discussions during a coffee break



Group Photo (from left): Dong, H. Andersson, Ding (front), Jacobsen, Heinselman, Gumbel, T. Andersson, Brekke, McCrea, Lønnum, Freeman, Nozawa, Aikio, Ulich, Sulonen, Vannas and Miyaoka



Second day: visit at the EISCAT Tromsø site and the planned EISCAT_3D Skibotn area