

Short Report from the 74th meeting of the EISCAT Council Held 3 – 4 June 2010, National Institute of Polar Research, Japan

Present: Dr. A. Aikio, Finland, Dr. T. Andersson, Sweden (Vice-Chairperson), Prof. A. Brekke, Norway, Prof. R. Fujii, Japan, Dr. B. Jacobsen, Norway, Dr. K. Kauristie, Finland (Chairperson), Dr. L. Lønnum, Norway, Dr. I. W. McCrea, UK, Dr. H. Miyaoka, Japan, Prof. D. Murtagh, Sweden, Prof. J. Röttger, Germany, Dr. K. Sulonen, Finland, Dr. M. Schultz, UK, Prof. J. Wu, P. R. of China, Dr. K. Zach, Germany.

Invited and in Attendance: Mr. H. Andersson (HQ), Dr. R. Liu (SOC Chairperson), Dr. S. Nozawa (Observer Japan), Dr. E. Turunen, (HQ), Dr. Q-p. Wang and Dr. Z. Wang (both Observers P. R. of China).

The Chairperson welcomed all to the 74th meeting and thanked NIPR for organising this meeting and helping with travel assistance. New persons were introduced to Council. The organiser, NIPR, gave some introductory words.

Memorials Prof. Henry Rishbeth and Sir Ian Axford

The two EISCAT old-timers who both had recently passed away were remembered.

Systems Status

The Director presented the systems status. The known loosing of the UHF remote site frequency spectrum was discussed. The proposal from the Swedish user group to convert the two remotes site antennas to allow reception of the current VHF frequency had been presented to the Scientific Oversight Committee, who favoured the idea. The proposal was discussed. An alternative option could be to find an empty whole in the frequency band after the spectrum had been taken in use by mobile operators, and use a very narrow frequency band transmit pulse instead.

After further discussions and since the both remote site were still in operation, Council agreed that the first attempt, after the frequency have been taken in use by mobile operators, to use a spectrum analyser, find empty wholes and try the narrow band pulse option first. If this would prove unsuccessful, the remote sites VHF conversion could be explored further.

The inability to point the VHF system field-aligned was also discussed, particularly in the context of using it as a tristatic illuminator. It was reported that in order to achieve field-aligned measurements, a massive hardware modification of the VHF system would be needed.

Future Operations

The Scientific Oversight Committee (SOC) had recommended to increase the 3rd party pool to allow for more than just one 3rd party operations per year (budget: 25 hours annually). The Executives had also expressed a desire to continue some kind of Transnational Access scheme in the future. After discussion, Council decided to open a peer-review allocation such that both external parties and user groups within the current EISCAT Associates would have the possibility to gain access to the systems. Council agreed that 200 hours annually would be open for peer-review competition starting from next year. The allocation would be taken from the existing Special

Programme pool. If not all hours would be used during a year, these would be returned to the SP-pool after the second peer-review call. SOC together with the EISCAT Scientists would act as the review panel and report to Council for decision. Two calls would be available each year, one to meet the spring SOC and Council meetings and the second to match the autumn meetings. Council asked the Executives together with SOC to prepare a set of application forms, evaluation criterias, etc. such that the administrative routines would be in place before the start of the year.

Proposal to build a third antenna on Svalbard

P. R. of China proposed in an earlier Council meeting that China would be willing to build a third antenna on Svalbard that would serve both Chinese lunar and deep space missions and provide expansion of the current EISCAT Svalbard Radar system. This dual-use concept had thereafter been considered further and the Chinese delegation now asked Council to go ahead and initiate a feasibility study to look into the logistics and contractual and legal requirements needed to build such third antenna system.

The Chinese third antenna system proposal include a 40-50 m fully steerable antenna housed in a dome and a separate building to contain the Chinese communications hardware, control and monitoring systems plus office space. To meet the preferred time schedule, the feasibility study would need to be started promptly such that final reporting can be done after summer, in time for the next Council meeting.

Since staff within EISCAT was not really available for this work, the Executives had already initiated discussions with a suitable consultant that was able and willing to perform the feasibility study. The cost for the feasibility study would be covered by the Chinese associate.

After some deliberations, Council warmly welcomed the Chinese proposal for the deployment of a third antenna at the EISCAT Svalbard Radar that would constitute an important improvement of the ESR system for many aspects of solar-terrestrial physics. Council agreed that a feasibility study should be launched promptly. This study will consider the actions needed to build a third antenna with a support building located at the EISCAT Svalbard Radar.

A delegation from EISCAT will within the coming weeks visit Beijing to further discuss the details and to sign a memorandum of understanding between EISCAT and P. R. of China.

Radar Schools and next International workshop

Council endorsed the proposal to arrange annually occurring radar schools and that EISCAT should cover, from next year onwards, the cost for hiring lecturers, venue, etc.

The 2011 International Workshop will be held in Qingdao, China, 5- 9 September 2011.

Closing the Annual Report of the Accounts 2009

The 2009 outcome resulted in a positive outcome of about 3.4 MSEK. The amount had been put in the Investment Fund. The positive result had been generated mainly from additional income. Council closed the Annual Report of the Accounts 2009.

2010 Financial development update

The forecast for 2010 indicated a minor loss of about 0.5 MSEK. It was reported that this shortage can likely be absorbed during the year.

Draft 2011 Budget and five-years plan

The budget plan for 2011 was presented. With the current knowledge, 2011 will be the last year of full current Associate contributions. Actions will be necessary to adapt to, in worst case, a reduced funding level when entering 2012. The Executives and the Council Advisory Group (CAG) proposed a pro-active approach to start already in 2011 to arrive at a better spend level for 2012. The primary objective would be to seek additional income but, if needed, reduce staff levels to match the loosening of operation possibilities. In order to achieve such strategy, a discussion with host organisation should be initiated such that these have ample time to accommodate potential staff returns.

Council agreed with the strategy and endorsed the proposed cost adaptation plan to be introduced in 2011 for full effect 2012 onwards.

Council discussed also to introduce a systematic approach to inflationary compensate the Associate contributions and asked the Executives to propose a suitable arrangement for consideration by CAG and Council in the autumn meetings and possible inclusion in the 2011 budget onwards.

EISCAT_3D project status

The preparatory phase proposal submitted to the European Commission received a positive judgement. Negotiations to enter a grant agreement under FP7 funding is currently ongoing. It is expected that the EU supported EISCAT_3D preparatory phase will commence towards the end of the year. The project will run for four years, included eight partners and have a total budget of about 6 M€ whereof EU will cover 4.5 M€

The science merits and the project details were presented by the acting project manager, Dr. McCrea.

The EISCAT_3D system is part environmental sciences in the updated ESFRI roadmap. Council discussed the project and particularly the science aspects. Council expressed sincere gratitude to all who have put so much of effort into EISCAT_3D.

Scientific presentation

Dr Masaki Tutsumi, NIPR, presented the current status of the Program of the Antarctic Syowa MST/IS Radar (PANSY).

EISCAT History

Council had discussed, already at the Council meeting in Helsinki, November 2007, the EISCAT history and the wish to secure stories from the early involved people. The problem at that time was to find a person that could work on such history project. EISCAT will celebrate its 30th Anniversary next year (inaugurated 26 August, 1981). It was concluded that it would now be suitable to prepare a history book for this occasion. Since it will probably be difficult to find one within the Association to interview old-timers, collect other material and edit this into a publishable form, Council agreed to seek a professional writer that could do this. Some suitable

candidates were identified and it was agreed to contact these. The findings will be discussed at the next meeting and hopefully a decision could then be made to start the work.

Next meetings

The 75th meeting will be held 2 – 3 November (or possibly 1 -2 November – to be decided later), 2010 in Cambridge, UK, at the British Antarctic Survey.

The 76th meeting will be held 31 May – 1 June 2011 in Helsinki, Finland.

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