



**FARO: Forum of Arctic Research Operators**

**FARO**

**FORUM OF ARCTIC RESEARCH OPERATORS**

**MEETING REPORT**

**3 APRIL 2003**

**KIRUNA, SWEDEN**





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## REPORT

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## Minutes

The 2003 FARO Meeting was held on 3 April 2003 in Kiruna, Sweden.

### **PARTICIPANTS**

See enclosed list – **Appendix I**

## **1. OPENING AND REPORTING SESSION**

### **1.1. WELCOME**

As Ms Bonni Hrycyk (the Chair of FARO) had had to cancel her trip to Kiruna, the FARO Executive agreed to ask Prof. Olav Orheim to chair this meeting. Prof. Orheim welcomed all participants, and extended regrets to Ms Bonni Hrycyk for being unable to attend.

### **1.2. ADOPTION OF THE AGENDA**

With the inclusion of some items under “Any Other Business”, the Agenda was adopted.

### **1.3. APPROVAL OF THE MINUTES**

An electronic draft of the Minutes of the previous meeting had been circulated for comments. No comments had been received to the final distributed paper version.

The Minutes were approved.

### **1.4. REPORT FROM THE CHAIR**

Due to the fact that Ms Hrycyk was unable to attend, no formal report by the Chair was available. However, some activities, such as FARO presentation at the COMNAP meeting, and teleconference meeting for the FARO Executive, were mentioned.

## 2. MAIN ISSUES

### 2.1. SHIP OPERATIONS

Information about arctic research vessels has been discussed previously in FARO, and general information is available on the FARO website:

<http://www.far-arctic.org>

In his introduction at this meeting, Prof. Anders Karlqvist proposed to collect more detailed information, doing so by focussing on real ice-breaking research vessels capable of operating all over the Arctic Ocean.

If a logistical cooperation is considered, we need more detailed information such as:

- ownership and mode of operation
- how scheduling is decided
- how decisions are taken for the use of research vessels and how far in advance, etc.

Several positive comments were given during the ensuing discussion, including information that classification information is available on Russian arctic research vessels.

However, all these vessels operate in different ways, it was proposed that UNOLS (University-National Oceanographic Laboratory System, USA) be tasked to work with ship operators to compile information on how each vessel can be made available to the international research community. UNOLS were suggested because of their experience in working with different research vessel operators in the US.

<http://www.unols.org/>

#### Decision

A working group consisting of Drs Anders Karlqvist and Simon Stephenson, assisted by 2-3 other persons to be established. Their main task being to organise the compilation of detailed information on arctic icebreaker research vessels starting with approximately the 10 most capable vessels. Draft report to be available within 6 months.

**Action: Karlqvist, Stephenson**

### 2.2 CEON: CIRCUMARCTIC ENVIRONMENTAL OBSERVATORIES NETWORK

A presentation on the CEON status was given by Dr Craig E Tweedie, who has made considerable promotion efforts together with Patrick J Webber and Thomas Pyle.

In short, CEON is intended to become a network of existing networks, as well as filling any existing gaps. A summary of CEON progress since the FARO 2000

meeting is enclosed as **Appendix II**, which also includes a selection of PowerPoint slides from the presentation, as well as a contribution by Morten Rasch, Denmark, about the Zackenberg Station and what they can use CEON for. More CEON information is available at:

[www.cevl.msu.edu/acl/projects/ceon.html](http://www.cevl.msu.edu/acl/projects/ceon.html)

FARO members were impressed by all the presentation work done, and noted with pleasure that similar presentations were given at Science Day and at IASC Council Meeting.

**FARO agreed to the proposed way forward, which is:**

- **Establishing an Interim Steering Committee, and**
- **Convening of a small workshop to draft an implementation plan.**

Drs Craig Tweedie, USA and Morten Rasch, Denmark were nominated to take the lead.

With regard to identifying potential members of an Interim Steering Committee, more consultations may be needed. However, the following agreed to serve as liaisons:

Sergey Priamikov, Russia

Pjotr Glowaski, Poland;

Zhanhai Zhang, China

Yoshiyuki Fujii, Japan.

Dr Jon Børre Ørbæk, ENVINET, was nominated. Other representatives of potential participating networks to be identified later.

**Action: Craig, Rasch** ✓

## **2.3 INTERNATIONAL POLAR YEAR (IPY) – 2007**

A major proposal for an IPY 2007-8 was presented at the Joint Meeting of the ASSW by Drs Chris Elfring and Chris Rapley, see **Appendix III** for more details. This proposal was met with much support when it was under discussion at other meetings during ASSW.

All comments made during the discussion were supportive to IPY, and to FARO for accepting the logistical responsibility for the Arctic. As IPY would also be a topic for discussion in other fora, including national IPY committees, the general FARO support should be mentioned.

Moreover, as IPY 2007-8 intends to be bi-polar, a cooperation with COMNAP was suggested.

**Decision:**

**FARO agreed to support the IPY 2007 – 8 initiative.**

**As a first step, the Chair of FARO to contact the Chair of COMNAP seeking his agreement to a joint letter of support to ICSU. As the IPY Steering**

**Committee may benefit from logistical advice in their planning, it should be considered whether a liaison person representing FARO and COMNAP should be a member of that committee.**

✓ **Action: Stephenson**

#### **2.4. ENVIRONMENTAL IMPACT OF RESEARCH STATIONS**

As a follow-up to last year's proposal on this theme, Dr Monica Kristensen Solaas, Director of the Kings Bay Company, which is renting out research stations to many countries in Ny-Ålesund, Svalbard, had been invited to give a survey of environmental impact studies undertaken, and environmental actions implemented.

Unfortunately, Dr Solaas had to leave the ASSW the day before the FARO meeting. However, a copy of her main introduction is enclosed as **Appendix IV**

#### **2.5. SATELLITE AND GROUND TRUTH CONTROL**

As the Science Day this year covered use of satellites, etc., this item was on the agenda, in order to deal with any actions arising from Science Day discussion.

Only one issue was brought to the table:

How to disseminate satellite information quickly to the user (for instance users in the Arctic Ocean during IPY)?

##### **Decision**

**Dr Mälkki or his nominee to draft a short paper on this theme for discussion at the next meeting.**

✓ **Action: Mälkki**

#### **2.6. FARO EXECUTIVE: ELECTIONS**

The outcome of the elections was as follows:

- Simon Stephenson, USA, Chair
- John Dudeney, United Kingdom
- Anders Karlqvist, Sweden
- Zhanhai Zhang, China

Warm thanks were extended to Bonni Hrycyk as the first Chair of FARO, and outgoing members of the FARO Executive (Olav Orheim and Thomas Pyle).



## 2.7. ANY OTHER BUSINESS

### 2.7.1 REPORT FROM COMNAP

As Dr Jugie had to leave Kiruna before the end of the FARO meeting, Prof. Orheim summarised his report which contained the outcome of the COMNAP's Fourteenth Meeting held in Shanghai 15 – 19 July 2002. Some of the issues could be considered for the Arctic.

- ∧ The full report is enclosed as **Appendix V**.

### 2.7.2 CLEAN POWER SUPPLY

Ideally, atmospheric monitoring requires no local pollution whereas energy production is needed both for humans and for operating instruments.

Dr Franck Delbart reported on the use of fuel cells as a way of energy supply at the Jean Corbel Station outside Ny-Ålesund, Svalbard.

- ∧ Further information about this experimental power supply is included in **Appendix VI**.

The French use of fuel cells attracted the interest of FARO members, and they wished an up-date at the next meeting, containing the experiences gained during the year.

✓ **Action: Delbart**

### 2.7.3 RESEARCH SENSORS IN THE ARCTIC OCEAN

Mr George B Newton, Chairman of the US Arctic Research Commission, introduced this issue dealing with the avoidance of mutual interference between research sensors in the ocean, with ships and submarines.

The Worldwide Navigational Warning Service (WWNWS) does not cover the Arctic (north of 67° N or 71° N), hence the Arctic Maritime Safety Information (AMSI) database has been established.

Unfortunately, this service is little known (and used) in the Arctic marine research community.

- ∧ Contact and other information is enclosed as **Appendix VII**.

### 2.7.4 AIRCRAFT OPERATIONS IN THE ARCTIC

Dr Roland Neuber (as an alternate to Dr Gernandt) raised the question of the need for an Arctic Flight Manual.

The idea was based on the benefits of AFIM (the Antarctic Flight Information Manual operated by COMNAP).

The need for an arctic manual was not clearly seen, as the Arctic is covered by

national aviation authorities. However, there may be other aspects worth considering, such as research flight cooperation and related issues.

**Decision:**

**Dr Gernandt was kindly asked to consider the comments and expand on his idea to the FARO Executive.**

**Action: Gernandt**

**2.7.5 RUSSIAN ARCTIC OCEAN STATION**

Dr Sergey Priamikov informed that a new drifting ice station to be launched close to the New Siberian Island. The station will be operated by a company based in Moscow, and AARI will be responsible for coordination of research. It will be started for use by Russian researchers, but opened for others later. A final decision on location and prices will be made in late summer 2003, and a website will be established.

**2.7.6 ICARP II**

During the ASSW initial plans were presented for an International Conference on Arctic Research Planning in 2005.

**Decision:**

**The FARO Executive to monitor the developments and consider FARO's role at this conference.**

**2.7.7 ASOF: ARCTIC/SUBARCTIC OCEAN FLUXES**

No ASOF up-date was given at this meeting. However, steady progress was noted.

.A A copy of the new ASOF brochure is enclosed as **Appendix VIII**.

**2.8 CLOSURE**

Prof. Orheim thanked all participants for constructive contributions and reported that the next FARO Meeting would, in all probability, be held on 25 April 2004, during the ASSW 2004 in Reykjavik, Iceland.