

**IRIS Board of Directors Meeting
April 11-12, 2017
IRIS Headquarters, Washington, DC**

Attendees:

Board Members: D. Wiens (Chair), G. Abers (Vice Chair), K. Fischer, M. Ishii, K. Koper, A. Nyblade, Z. Peng, D. Shillington, M. West

IRIS Staff: R. Detrick (President), T. Ahern (4/11/17 morning only), Leslie Linn, C. Shin, J. Taber, R. Woodward, R. Woolley, K. Anderson (4/11/17 only), R. Busby (4/11/17 only), B. Evers (4/11/17 only), A. Frassetto (4/11/17 only), K. Hafner (4/11/17 only)

Standing Committee Chairs (4/11/17 only): R. Aster, G. Pavlis, J. Louie, J. Park, A. Sheehan, B. Stump, L. Wagner

AGENDA

Monday, April 10th

3:00-5:00 Board Member Orientation – John Rodock (Baker Donelson), Jacqueline Henson (Baker Donelson), Greg Plotts (Aronson LLC), Woolley, Shin

5:30-7:00 Buffet dinner at IRIS HDQ

Tuesday, April 11th (Board, SMT, PM and SC chairs)

8:00-8:30 Breakfast

8:30 Welcome – Chair’s and President’s remarks

8:35 Approval of Consent Agenda

8:45-10:00 Management and Program Guidance I

- CoCom Report (*Abers*)
- Feedback on virtual meeting format
- NCEO Proposal review update (*Detrick*)

10:00-10:15 *Break*

10:15-11:00 SAGE Yr 5 Plan and Budget

11:00-12:00 Future Planning I

- TA demobilization plans (*Woodward*)
- CCArray/CC-Net update and SC feedback

12:00-1:00 *Lunch*

1:00-2:30 Future Planning II

- CEUSN transition plans (*Woodward*)
- SZO Workshop Report (*Detrick*)

2:30-3:00 Preparation for NSF and USGS

3:00-3:15 *Break*

- 3:15-4:15 Discussion with NSF and USGS
- 4:15-4:30 *Break*
- 4:30-5:15 Management and Program Guidance II
- Venue for 2018 IRIS Community Workshop (*Linn*)
 - Pilot Seafloor GSN WG charge and membership (*Woodward*)
 - Seismic Source Facility WG charge and membership (*Woodward*)
- 6:00 Dinner Old Ebbitt Grill (675 15th St NW)

Wednesday, April 12th (Board and SMT)

- 8:00-8:30 Breakfast
- 8:30-10:00 Future Planning III
- Funding outlook and contingency planning (*Detrick*)
 - DC Office lease (*Detrick, Woolley*)
 - Recompensation of professional services contracts (*Woolley*)
 - Simpson Innovation Fund RFP (*Detrick, Abers*)
- 10:00-10:15 *Break*
- 10:15-11:00 Future Planning IV
- IRIS Investment Policy (with Bill Keeth, Morgan Stanley)
- 11:00-12:00 Board Executive Session (Board + President)
- 12:00-1:00 *Lunch*
- 1:00-3:30 Board Executive Session (con't)
- Adjourn

MINUTES

Meeting called to order by Board Chair Doug Wiens about 3:00 pm on April 10th, 2017.

1. Board Training (Board attendees: Z. Peng, D. Shillington, M. West, D. Wiens)

An ~2 hour orientation session was held for new Board members. Attorneys Jacqueline Henson and John Rodick, from the Baker Donelson law firm gave a presentation on good non-profit governance and the legal responsibilities of the non-profit Director. We also heard from Greg Plotts, IRIS auditor at Aronson LLC. Candy Shin presented a financial overview of IRIS and Rob Wooley described IRIS's organization, proposal and budget.

2. Consent Agenda

Vote: The Board unanimously approved the following motion (Nyblade moves; Fischer seconds):
"The Board approves the following Consent Agenda items as presented in the April 7th, 2017 pre-Board webinar with documentation provided and reviewed prior to this Board meeting."

- The Board received and approved the Minutes of the January 19 & 24th, 2017 virtual Board meeting. Minutes have been posted on the BoD website.
- The Board approves the CC-Net “Statement of Interest”
- The Board approves IRIS participation in the Univ. of Kansas Syntaxis Proposal
- The Board approves PASC’s request for flexibility in spending \$375K in M&S funds in Yr. 5 SAGE budget previously approved by the Board
- The Board approves IRIS’s Form 990 for submission to the IRS
- The Board approves the IRIS/SSA Distinguished Lecturers for 2018 (Katie Keranen, Frederik Simons)

3. Management and Program Guidance I

3.1 CoCom Report

Geoff Abers presented the CoCom report to the Board. The charge to CoCom for its March 23rd virtual meeting was: (1) formulating the SAGE Yr 5 budget request based on Board guidance on SAGE Yr 5 budget levels, (2) describe impacts of continuing flat budgets on SAGE programs and operations, (3) provide feedback to the Board on CCArray/CC-Net, (4) provide feedback to the Board on the virtual meeting format, and (5) discuss issues to pass to the Board. The Board response to issues raised by CoCom were discussed in the Board Executive Session and will be transmitted to CoCom following the Board meeting.

The Board had an extensive discussion in both open and executive session on the request from CoCom to provide more guidance on the roles of governance and management in the IRIS advisory structure. As IRIS has evolved into a more complex organization, and Standing Committee Chairs and Program Managers have changed, it is important for all parties to have a clear understanding of their responsibilities. To address this issue the Board agreed on the following two action items:

Action Item (1704-01) – The Board will prepare a document that describes best practices in managing and governing programs designed to both improve communication and clarify the roles of both Standing Committee Chairs and Program Managers. This document should be available at or before the Fall 2017 Standing Committee meetings to allow for discussion by the committee chairs, program managers and Board liaisons.

Action Item (1704-02) – IRIS will begin the practice of holding annual virtual orientation meetings for Standing Committee Chairs and Program Managers so there is a common understanding of these best practices.

3.2 Feedback on Virtual Meeting Format

The Board reviewed the pros and cons of the virtual meeting format which all Standing Committees and the IRIS BoD experimented with this Winter/Spring. While some committees have successfully used the virtual meeting format (e.g. CoCom, TAAC, EMAC), the overwhelming opinion is that the major standing committees (GSN, PASC, EPO, DSSC) should have 2 face-to-face meetings a year. They found virtual meetings are less effective than face-to-face meetings because of the constrained quality of communication and diminished personal interactions between committee members. With virtual meetings it is also difficult to bring new members up to speed on committee issues and there is increased risk of miscommunication at all levels. The Standing Committee Chairs and Program Managers strongly recommended that IRIS work with NSF to restore funding for 2 face-to-face meetings for these four standing committees in SAGE Yr. 5. If that is not possible, the nearly unanimous view is that the Spring Meeting should be a face-to-face meeting.

Action Item (1704-03) – IRIS should work with NSF to restore funding for 2 face-to-face meetings for GSN, PASC, DSSC and EPOSC in SAGE Yr. 5.

3.3 N GEO Proposal Review Update

Bob Detrick provided a brief update on the review of the IRIS N GEO proposal. A programmatic review of the N GEO proposals will take place the week of April 24th. IRIS will participate in a 2-hour videoconference with the Panel and NSF staff on Monday, April 24th from 1-3 pm EDT. IRIS has been asked to make a 20-minute overview presentation followed by Q&A. On Thursday April 27th IRIS and UNAVCO will jointly participate in a second 2-hour videoconference Q&A session with the Panel and NSF staff. NSF is also conducting a cost review of the IRIS proposal.

4. SAGE Yr. 5 Plan and Budget

The SAGE Yr. 5 budget was presented to the Board for its review and approval. The proposed budget meets the budget targets provided by the Board at its January meeting with 2 significant changes. In order to cover its labor and essential travel costs, the ISM budget exceeded the Board guidance. The SMT recommended addressing this deficit by reducing Participant Support costs for the 2018 IRIS Community Workshop and transferring these funds to the ISM budget. Carry-forward Participant Support funds will be used to restore the workshop budget. The Board accepted these changes and approved the SAGE Yr. 5 budget.

Note: Following discussion the Board unanimously approved the following motion (Abers moves; Shillington seconds): *“The Board approves the SAGE Yr. 5 Annual Plan and Budget”.*

5. Future Planning I

5.1 Alaska TA Demobilization Plans

The Board was updated on recent guidance from NSF on demobilization of the TA in Alaska and also reviewed an options paper on demobilization prepared by the TAAC and the ISSC. At a meeting on 3/15/17 NSF informed IRIS that they expect demobilization to begin in Spring 2019 and be completed in 2 years. NSF has not yet decided if demobilization will be funded through a supplement to the existing SAGE award or a new proposal (IRIS favors a supplement for a variety of reasons). NSF is open to adoption of TA stations in AK as was done in the L48, although it has not decided how that program income might be used. We expect a funding request for demob costs will have to be submitted to NSF in the last quarter of 2017 or first quarter of 2018.

The options paper outlined a number of variables associated with costing the demobilization operation including the overall schedule, the number of “adopted” stations, the final location of equipment and any sequencing with other non-TA activities (e.g. CCArray), and impacts on other geophysical observables and stakeholders. The options paper presents notional budgets for two different scenarios, one assuming no adoptions beyond 8 AVO “leave-behind stations” and a second scenario with 20 or 30 adoptions. It was noted that the TA capability (human as well as hardware) may phase out before new community-led projects such as SZO or GABBA that might utilize the TA capability are developed and underway.

5.2 CCArray/CC-Net Update and SC Feedback

The Board was updated on CCArray, a project to install telemetered geophysical observatories within and adjacent to the Canadian Cordillera. A Canadian group, led by David Eaton at the University of Calgary, submitted a pre-proposal in March 2017 to NSERC for a 5-year pilot study and research program. CC-Net includes plans for 5 new TA-like stations as well as operation of

several TA stations previously adopted by the Yukon Geological Survey. IRIS provided a “Statement of Interest”, approved by the BoD, for the CC-Net proposal.

The Board had solicited input from standing committees regarding CCArray. There is little or no support among the standing committees for spending significant funds to extend the Alaska TA deployment for an additional period of time to bridge to CCArray, especially given the uncertainty of if, and when, CCArray might be funded. There was also concern on the PASC that re-tasking TA station to CCArray would directly impact the PASSCAL Instrument Center as the TA hardware is needed to update/sustain the PASSCAL instrumental pool.

6. Future Planning II

6.1 CEUSN Transition Plans

The status of CEUSN was presented to the Board. The N4 CEUSN network, which consists of 158 TA seismic stations, is part of a larger network of over 300 broadband stations in the Central and Eastern US. IRIS has funding in hand to operate the N4 network through FY17. USGS has indicated a desire to have IRIS operate the N4 network through FY18 via an interagency transfer of funds from USGS to NSF. IRIS’s role in the operation of the N4 CEUSN network beyond FY18 is uncertain.

Some concern was raised with the Board about whether USGS will have sufficient funds in FY18 to support the operation of the N4 network. It was noted that there are cross-dependencies between CEUSN funding and the TA including some TA staff salaries and the ANF at UCSD. The Board discussed options for IRIS if full funding for the CEUSN network is not available in FY18.

6.2 SZO Workshop Report

Bob Detrick provided a brief update to the Board on the SZO Workshop. The workshop writing committee has developed a report, “*The SZ4D Initiative: Understanding the Processes that Underlie Subduction Zone Hazards in 4D*”, that presents the range of views discussed at the workshop on the high-priority science targets, the critical gaps that are holding back subduction zone science, the need for interdisciplinary in-reach and capacity-building outreach, and the promising paths forward that the academic, national agency, and international communities could pursue in the coming years to transform subduction zone science. Taken together, these views lead to a vision for a new SZ4D Initiative to capture and model the 4D evolution of subduction zones.

A draft of the workshop report was posted on the workshop website on April 7, 2017: (https://www.iris.edu/hq/workshops/2016/09/szo_16/). The report will be available for public comment through May 1st, after which the report will be finalized by the writing committee. A meeting is scheduled for May 25th to present the report to NSF.

7. Meeting with NSF and USGS Agency Representatives

The Board had a 1½ hour discussion with NSF and USGS. NSF was represented by Carol Frost; Cecily Wolfe represented USGS. The discussion covered a wide range of topics including personnel changes in NSF’s GEO Directorate, the reorganization of NSF’s EAR Division, the elimination of program deadlines at NSF, and funding for CEUSN and GSN modernization.

8. Management and Program Guidance II

8.1 2018 IRIS Community Workshop

The Board discussed possible venues for the 2018 IRIS Community Workshop. Venues considered included Albuquerque, NM, Salty Lake City, UT, Milwaukee, WI, and Madison, WI. The least expensive venue is Albuquerque and IRIS will pursue that venue, getting proposals from the

DoubleTree Hotel and the Hotel Albuquerque. Zhigang Peng was identified as the Board liaison to the Workshop Organizing Committee.

Action Item (1704-04) – IRIS staff will obtain meeting venue proposals for the 2018 IRIS Community Workshop in Albuquerque, NM for meeting dates in June 2018.

8.2 Pilot Seafloor GSN WG Charge and Membership

The Board reviewed a draft charge developed by the GSNSC for a “Pilot Seafloor GSN Project”. The Board strongly supports the establishment of a working group to take the first steps towards developing a pilot project for installation of a high-quality permanent seismic network in the open ocean. However, the Board would like to see some changes to the draft working group charge, including a more general name reflecting potential uses beyond the GSN and adding working group members from one of the OBSIP IICs and the OBSIP Oversight Committee. There was not agreement on Board about whether this should be a working group of the GSNSC or the ISSC, and this will have to be resolved by the Board before revising the Working Group charge.

Action Item (1704-05) – A revised working group charge will be prepared by the Board and distributed to the ISSC, GSNSC and OBSIP Oversight Committees

9. Future Planning III

9.1 Funding Outlook

Bob Detrick updated the Board on FY17 and FY18 Funding. FY17 funding is currently on a Continuing Resolution (CR) until April 28th, 2017. The Trump Administration has proposed ~\$18B in domestic spending cuts for FY17, but it is unclear whether Congress will enact these cuts. The most likely outcome at this point appears to be an omnibus bill, a CR for the rest of FY17, or some combination of these options (a so-called “cromnibus” appropriation bill). The funding prospects for FY18 are even less certain at this point. The Trump Administration is expected to release a complete FY18 budget in mid-May and NSF is likely to be targeted for a 10% reduction. There is also concern that some factions in Congress still want to prioritize NSF R&RA spending for MPS, ENGR, CISE and BIO, which could lead to additional reductions in GEO’s budget. Detrick pointed out that IRIS has already received all but \$1.6M of its SAGE Yr. 4 funding, and in a normal year would receive about 90% of its SAGE Yr. 5 funding from NSF’s FY17 budget.

Action Item (1704-06) – The SMT should develop contingency plans for a reduction of 5% and 10% in SAGE Yr. 5 funding for presentation and discussion by the Board.

9.2 DC Office Lease

IRIS’s DC Office Lease runs through November 2021. IRIS currently leases 11, 536 square feet and pays \$55.84/sq. ft. Detrick noted that IRIS has more space than it currently needs and is paying top dollar for this space. In an effort to find ways of reducing these overhead costs, IRIS has engaged a real estate firm, West, Lane & Schlager to develop options for reducing IRIS’s office lease costs.

Action Item (1704-07) – West, Lane & Schlager will develop a report outlining options for reducing IRIS’s office lease costs. A draft of this report will be distributed to the Board this summer and the final version of the report will be discussed at the November Board meeting.

9.3 Recompetition of Professional Service Contracts

Rob Woolley informed the Board that IRIS intends to recompetete the professional services contract for IRIS’s law firm (currently Baker Donelson) and IRIS’s retirement plan advisor (currently Meltzer). The selection team for the law firm will be Rob Woolley, Bob Detrick, Ruth Sobel, Trisha

Pinkney and Mike West (representing the Board). The selection team for a new retirement plan advisor will be Rob Woolley, Kent Anderson, Brent Evers and Trayce Turner.

9.4 Unrestricted Fund Expenditures

Candy Shin summarized for the Board the use of IRIS's unrestricted funds. These uses fall into four broad categories: Unallowable expenses (lobbying, liquor and other unallowable expenses), IRIS-supported activities (cost sharing on proposals, fundraising), advances on non-NSF awards and rebill activity. The latter two uses are only temporary outflows and are reimbursed by 3rd parties. In recent years the permanent outflows have been ~\$150-180K/yr while the reimbursable outflows are around \$80,000/yr. Shin asked for Board permission to make withdrawals from IRIS's Morgan Stanley Investment Account to cover these expenses in IRIS's 2018 FY.

Vote: Following discussion the Board unanimously approved the following motion (Ishii moves; Fischer seconds): *"The Board approves the withdrawal of funds from IRIS's Morgan Stanley Investment Account to cover current and projected unrestricted expenses for IRIS's next fiscal year. The Board requests that a budget for projected unrestricted expenses for the following fiscal year be presented to the Board each year at its Spring meeting."*

9.5 Simpson Innovation Fund RFP

The Board discussed a draft Simpson Innovation Fund RFP prepared by Bob Detrick and Geoff Abers (see attachment). While the Board was generally satisfied with the wording of the draft RFP, it was suggested there should be more of an open call for proposals. The raised several issues, for example: Should proposals still have to be submitted by Standing Committees? Should these be grants or should the funds remain with IRIS to support the proposed activity? It was also noted that the RFP should clearly state that these funds were raised specifically for this purpose and therefore it would not be appropriate to use these funds to offset shortfalls in funding for NSF-funded programs or activities. The Board did not reach a consensus on these questions, leading to the following action item:

Action Item (1704-08) – Bob Detrick, Geoff Abers and Karen Fischer will work on revising the Simpson Innovation Fund RFP to reflect the Board discussion for approval at the next Board call (probably in June).

10. Future Planning IV

10.1 IRIS Investment Policy

Bill Keeth from Morgan Stanley briefed the Board on IRIS's unrestricted investment account. The return on IRIS's investment was 4.67% in the first quarter of 2017 and 12.44% over the past 12 months. IRIS's assets are invested in Morgan Stanley's Model 4 ETF portfolio. IRIS is preparing a written Investment Policy and the Board's input on this policy was solicited. Topics discussed included the results of a 2016 BoD survey on IRIS's investment policy, the Board's investment goals and objectives, risk tolerance, and asset allocation.

Action Item (1704-09) – The Board is asked to provide comments on the draft policy by 4/28/17. An updated Investment Policy will be distributed to BoD in early May.

11. Other Business

Action Item (1704-09) – The Board approved a resolution honoring Bob Hutt (see attachment)

Action Item (1704-10) – The Board Chair was asked to send Anne Sheehan a note thanking her for

her extraordinary efforts as Chair of the OBSIP Oversight Committee the past 6 months to get the OBSIP renewal proposal back on track.

11. Board Executive Committee Session

The Board met in Executive Session from 11:00-3:30 pm. Topics included: approval of the SAGE Yr. 5 Plan and Budget, response to CoCom Issues for the Board, roles and responsibilities of management and governance, the proposed GSN Working Group charge, and succession planning for key IRIS staff.

Meeting adjourned by Board Chair Doug Wiens about 3:30 pm on April 12, 2017.

**Resolution Honoring
Charles Robert “Bob” Hutt**

**On His Retirement from Albuquerque Seismological Laboratory of the
United States Geological Survey**

WHEREAS, Bob Hutt, is retiring in April 2017, after 46 years of outstanding and meritorious service to the seismological community; and

WHEREAS, Bob began his seismological career as a winter-over technician servicing the South Pole WWSSN station; and

WHEREAS, as a result of his talent and passion for seismological instrumentation, Bob participated in key developments in multiple global seismological networks, including the World-Wide Standardized Seismograph Network, the Seismic Research Observatory, the China Digital Seismograph Network, the Global Digital Seismograph Network, and the Global Seismographic Network; and

WHEREAS, in recognition of his outstanding leadership skills, Bob was appointed as Chief of the Albuquerque Seismological Laboratory of the United States Geological Survey and led a wide range of innovative research, development, and testing activities in the field of global seismology; and

WHEREAS, through his outstanding engineering skills, Bob helped to realize the current era of very broad band global digital seismological instrumentation; and

WHEREAS, throughout his many years of service, Bob has served the seismological community with unwavering dedication: Therefore be it RESOLVED, that we, the Members of the Board of Directors, of the Incorporated Research Institutions for Seismology, do hereby extend to Bob Hutt our sincere and grateful appreciation for his dedicated service to the seismological community, our congratulations on his well-earned retirement, and our best wishes to him for continued success, happiness, and good health in the years to come.

Adopted in Washington, District of Columbia, this twelfth day of April 2017.