IRIS Board of Directors Meeting
Nov. 13-14, 2019
Fort Collins, CO

Attendees:

**Board Members:** D. Wiens (Chair), C. Thurber (Vice Chair), R. Aster, S. Hansen, V. Schulte-Pelkum, Z. Peng, D. Shillington, S. Schwartz; C. Ammon (only on Day 2 by teleconference)

**IRIS Staff:** R. Detrick (President), J. Carter, C. Shin, J. Taber, R. Woodward, R. Porter

**AGENDA**

*Wednesday, November 13th*

8:00–8:30   **Breakfast**

8:30–8:35   Welcome – Chair’s and President’s remarks

8:35–8:45   Approval of Consent Agenda

8:45–10:00  Review of proposed IRIS By-Law changes (Detrick)

10:00–10:30 **Morning Break**

10:30–12:00 Programmatic Updates

- Instrumentation Services (Woodward)
- Data Services (Carter)
- EPO (Taber)

12:00–1:00  Lunch

1:00–1:30   Preparation for calls with NSF and USGS

1:30–2:15   Conference call with Maggie Benoit and Mike Jackson (NSF)

2:15–2:45   Conference call with Cecily Wolfe (USGS)

2:45–3:00   Discussion of calls with NSF and USGS

3:00–3:15   **Afternoon Break**

3:15–4:00   Management and Program Guidance I

- CoCom Issues for Board (Thurber)
- Governance Committee Nominations (Thurber)

4:00–5:30   Management and Program Guidance II

- SAGE II Carryover Funds Process (Detrick, Shin)
- Revised DS Data Provider Agreement (Carter)
- Update on SSFAC Discussions with NSF (Woodward)
- GSN Design Goals Working Group Membership (Woodward)
- DAS-SPRESSO Proposal (Woodward)
- Simpson Fund Support for International Interns (Detrick)

6:30   **Dinner** (Jay’s Bistro; located in Old Town, Ft. Collins)
Thursday, November 14th

8:00–8:30  Breakfast
8:30–10:00  Strategic Restructuring Discussion
  - Discussion of La Piana Strategic Partnership Assessment report
  - Feedback from community and IRIS staff on NSF announcement
  - Post-2023 IRIS strategic planning (workshops, questionnaires, etc.)
  - Discussion of IRIS’ position on merger negotiation issues

10:00–10:15  Morning Break

10:15–12:00  Strategic Restructuring Discussion (with Lucy Flesch, UNAVCO Board Chair and Chuck Meertens, Acting UNAVCO President)

12:00–1:00  Lunch

1:00–1:30  Other Issues
  - AGU plans (Membership Meeting, IRIS Booth)
  - 2020 SAGE-GAGE Community Workshop

1:30–4:00  Board Executive Session
  - Response to CoCom Issues for Board
  - Governance Committee Appointments
  - Presidential Search update (Ammon)
  - Other items requiring Board approval
  - Dates for Winter and Spring BoD Meetings

Adjourn

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MINUTES

Meeting called to order by Board Chair Doug Wiens about 8:30 am on Nov. 13th, 2019.

1. Consent Agenda

Motion 1911-01: The Board unanimously approved the following motion (Aster moves; Peng seconds): “The Board approves the following Consent Agenda items as presented in the Nov. 7th, 2019 pre-Board webinar with documentation provided and reviewed prior to this Board meeting.”

- April 2019 Board Meeting Minutes*
- Appointment of Board Nominations Committee (Doug Wiens, Karen Fischer, Andy Newman, Lindsay Lowe Worthington)
- Appointment of Presidential Search Committee (Chuck Ammon (Chair), Rick Aster, Jeffrey Freymueller, Sam Hansen, Thorne Lay, Vera Schulte-Pelkum, Chad Trabant, Marlo Swanson, HR rep)
- Approval of La Piana contract*
- Approval of Martin, Blanck and Associates (Charles Monfort, lobbyist) 2020 contract

2. Review of Proposed IRIS By-Law Changes

The IRIS By-Laws have not been changed since 2010. Bob Detrick reviewed proposed changes in the By-Laws to update them and to bring them in compliance with Delaware corporate law. The Board agreed to the following significant changes:
• Article II, Section 3 and 4: Rename U.S. Affiliate and Foreign Affiliate Members as Associate Members.
• Article II, Section 7: Change language on Suspension and Expulsion of Members or Affiliates to require removal by cause by two-thirds (rather than unanimous) vote of the Board of Directors or by a majority (rather than two-thirds) of the voting Membership.
• Article III, Section 4 and 11: Update text to deliver notice of Members Meetings by first class mail or email, eliminating notice by fax.
• Article 4, Section 2: The Board reaffirmed that Directors should be from voting Members.
• Article IV, Section 3: Eliminate legacy text and address the term of an existing Board member who is elected Board Chair or Vice Chair.
• Article IV, Section 4: Add a condition for removal of a Director by a two-thirds vote of the Board of Directors or a majority of the Members.
• Article V: Update text to permit virtual Board Meetings (Section 3); and allow notice of Board of Directors meetings by first class mail or email, eliminating notice by fax (Section 4).
• Article VI, Sections 1 & 5: Change text to not require the Secretary to be Board member.
• Article VII: Change in nomenclature for Board Committee to be consistent with Delaware law (Advisory Committees, Board Committees, Special Committees).
• Article IX: Change language to allow the Board of Directors to waive at its discretion the Initial Membership Fee
• Article X: Change text to clarify that the Board of Directors only sets the salary of the President, not other employees of the corporation
• Article XI: Update legal language regarding Indemnification, Insurance, etc.
• Article XIII, Section 1: Change language to require approval of seven of nine Directors to amend the Bylaws (rather than unanimous approval of the Board)

Action Item (1911-01) – The revised Bylaws will be circulated to the Board for formal approval. If approved by the Board these revised Bylaws will be submitted to the Membership for approval.

3. Programmatic Updates
Bob Woodward, Jerry Carter and John Taber gave the Board updates on the status of the Instrumentation Services, Data Services and Education and Public Outreach programs.

4. Teleconference with NSF and USGS Agency Representatives
The Board had a 45-minute telecom with Maggie Benoit (EAR) and Mike Jackson (OPP) from NSF. Topics discussed included:
• When we can expect to get our 2nd six months of funding for SAGE Yr 2
• When we can expect the DCL on post-2023 SAGE/GAGE facility management to be issued
• NSF’s expectations for the CORES report and how it will that be used to determine future geophysics facilities
• How community input on post-2023 facility needs and priorities will be obtained
• When we can expect to receive the DS review report
• The format and scope of the SAGE/GAGE instrumentation review in 2020
• How OPP fits into this EAR strategic planning process
• Availability of TA data recorded on flash drives after telemetry is shut down next Spring

The Board also had ~30 min call with USGS including Cecily Wolfe (Associate Coordinator for Earthquake Hazards, Global Seismographic Network, and Geomagnetism Programs), Jonathan Godt (Acting Science Advisor for Earthquake and Geologic Hazards) and Bill Leith (former Science Advisor for Earthquake and Geologic Hazards). Topics discussed with USGS included:
• Status of search to fill Science Advisor for Earthquake and Geologic Hazards
• The budget outlook for USGS in FY20
• Sustaining USGS GSN funding for borehole installation beyond 2020/21 to begin replacement of STS-1 vault sensors
• Funding in 2020 for continuing of the MT L48 surveys and whether USGS plans to outsource this work or do it in-house
• USGS plans for a subduction zone initiative
• What input USGS is providing to NSF on the major restructuring of its geophysical facilities post-2023 that NSF is planning and its re-evaluation of the scope of the geophysical facilities it supports

5. Management and Program Guidance I
Cliff Thurber presented the CoCom report to the Board. He reviewed a list of several informational items from CoCom for the Board and six items CoCom asked for a Board response on. The Board response for these items is summarized below.

5.1 Decisional Items for the Board

5.1.1 (DSSC): Requests Board approval for revised DS Data Provider Agreement. The main revision is to include a provision for termination of the agreement upon written notification by either party. Data made freely and openly available up to the termination of this agreement will remain freely and openly available through the IRIS DMC, or through another FDSN Federated Data Center.

Motion 1911-02: The Board unanimously approved the following motion (Thurber moves; Peng seconds): “The Board approves the revised Data Services Provider Agreement.”

5.1.2 (GSNSC): Requests Board approval for adding a geodesist and a person with cryosphere expertise to the GSN Design Goals Working Group.

See section 6.2 below for Board response.

5.1.3 (PASC, DSSC and EPOSC): Request guidance from the Board on how to obtain community input on the proposed SAGE/GAGE merger.

The Board expects additional guidance from NSF on how they would like to obtain community input on future facility needs and priorities for an integrated seismogeodetic facility post-2023. NSF does not appear to be planning a major “Leesburg-type” workshop like was held in 2015, but what they do want to do, and whether or not they want IRIS and UNAVCO involved, is unclear at this point.

The Board is planning to hold a 1-day strategic planning retreat on April 14th the day before the Spring Board of Directors meeting. The purpose of this retreat, which will involve the Board, the SMT, Project Leads and Program Managers, and Standing Committee Chairs, will be to identify the facility needs and priorities of the seismological community post-2023. It is anticipated that the results of this planning meeting will be input for a joint IRIS-UNAVCO strategic planning workshop to be held later in 2020.

5.1.4 (TAAC): Requests guidance from the Board on when to disband the TAAC and how to maintain TA technical expertise.
The Board recommends disbanding the TAAC after the 2020 field season in Fall 2020. The Board suggests that TA staff prepare a document similar to the report “The Design and Implementation of EarthScope’s US Array Transportable Array in the Coterminous United States and Southern Canada” for Alaska. This report should summarize the key aspects of the design, implementation and operation of the TA in Alaska, ensuring that this important information is preserved for future use.

The Board also notes that SRL is planning to publish a special issue on the Transportable Array and TA staff should also consider submitting an article for that special issue describing technical aspects of the TA.

5.1.5 (PNSC): Requests approval of proposed name change for the PNSC to Polar Science and Technology Committee (PSTC) and the development of new Terms of Reference.

The Board approves the proposed name change for the PNSC and encourages the committee to submit new Terms of Reference for Board review and approval.

5.1.6 (IDSC): Requests the Board approve use of Simpson Innovation Funds to support two additional International Summer Interns in 2020.

While the Board considers the International Summer Intern program a successful and appropriate use of Simpson Innovation Funds, after discussion the Board decided to decline the IDSC request to support two additional International Interns in 2020. The Board instead plans to issue a new RFP in early 2020 for utilization of the remaining Simpson Innovation Funds (~$71K). The IDSC is encouraged to submit a proposal to this RFP as well as seek other sources of funding for this worthy program.

Action Item (1911-02) – A new Simpson Innovation Fund RFP should be prepared by IRIS staff and submitted to the Board of Directors for review and approval.

5.2 Governance Committee Nominations

5.2.1 DSSC: The Board approves Diana Roman for the DSSC Chair, with Jonathan Ajo-Franklin and Ebru Bozdag approved to fill the other vacancies.

5.2.2 GSNSC: The Board approves the GSNSC’s recommendation of Colleen Dalton for the Chair of the GSNSC and recommended Keith Koper as alternate if Colleen cannot serve. It notes that Dalton is also a candidate for the IRIS BoD. The Board approved Shawn Wei and Harriet Lau for the other two vacancies on the GSNSC.

5.2.3 PASC: The Board approves Marianne Karplus to fill the one vacancy on the PASC.

5.2.4 EMAC: The Board approves Samer Naif and Pieter Share for the two vacancies on the EMAC, with Heather DeShon as an alternate if one of them is unable to join the committee.

5.2.5 IDSC: The Board approves Maureen Long as the next Chair of the IDSC and Cindy Ebinger and Emma Hill for the other two vacancies on the committee (Note: Peter LaFemina is on the DSSC)

6. Management and Program Guidance II
The Board was updated on several programmatic issues:

6.1 SAGE II Carryover Funds Process
CFO Candy Shin updated the Board on the carryover funds process that we will be using in SAGE-II which is somewhat different than in the past. NSF will have to approve our use of carryover funds in SAGE-II; a report must be submitted to NSF by December 15, 2019.

The three Directorates have identified their priorities for the use of SAGE-II Yr 1 carryover funds as follows:

- **DS** – purchase a replacement for the Hitachi RAID for the SEED archive. The Hitachi RAID will no longer be supported after June 2021. A replacement ($600K) will be procured with Y1 carryover and redirection of Y2 funds.
- **IS** – purchase of additional nodal sensors which are in high demand by the community
- **EPO** – purchase of additional near-surface geophysical equipment for educational use

The Board endorsed this use of SAGE-II Yr carryover funds.

**Action Item (1911-03)** – Submit a SAGE-II Yr 1 carryover report to NSF by December 15, 2019. Provide a copy of this report to the Board.

6.2 Revised DS Data Provider Agreement
See section 5.1.1

6.3 Update on SSFAC Discussion with NSF
The Board was briefed on discussions with NSF about possible changes in funding models for the Seismic Source Facility (SSF). In the proposed model, UTEP will no longer be a co-PI on NSF proposals, and source-related expenses will no longer appear in the PI/co-PI research budgets. Rather, IRIS will include a support letter identifying a supplemental budget that will cover all expenses associated with source-related activities for that experiment. This is currently required for using the SAGE PASSCAL, MT, and Polar facilities as well as GAGE facilities, and is also used for OCE’s OBSIC facility. Once reviews are complete, IRIS will work with NSF to update and revise the budgets for those proposals which are most likely to be funded to allow for a more accurate SSF cost proposal (some proposals change in scope once funded and may have had estimates that were made long before actual funding decisions are made). Once the award is made, funds for the SSF work will be routed through IRIS to UTEP (mechanism TBD) and will be reported to the associated SAGE governance committees for oversight. The Board will be kept informed of the progress of these discussions with NSF.

6.4 GSN Design Goals Working Group
The GSNSC sought Board approval for two additional members of the GSN Design Goals Working Group. The Board approved Dylan Mikesell (alternative Weisen Shen) to fill the cryosphere spot on the committee and Jim Davis (alternates Kristine Larson or Mike Bevis) to fill the geodesist vacancy.

Given the recently announced NSF intent to integrate the SAGE and GAGE facilities post-2023, and possibly reduce the scope and budget of the integrated facility, the Board felt the design and operation of the GSN needs to be rethought. One approach might be to consider how a VBB array like the GSN might be designed if it were being built today. Are there ways to leverage the advances in instrumentation and communications and the high quality regional networks that now exist to significantly improve efficiencies and reduce costs? However, it is now clear that this committee is the right committee to take on this task. Doug Wiens will discuss with Jeff Park, chair of the GSNSC.
**Action Item (1911-04)** – Doug Wiens will contact Jeff Park, chair of the GSNS to discuss these Board comments.

**6.5 DAS-SPRESSO Proposal**
Bob Woodward briefly described plans to submit a proposal to NSF to conduct a DAS (Distributed Acoustic Sensing) experiment at the South Pole.

**Action Item (1911-05)** – Board reviewers for the SPRESSO proposal will be Cliff Thurber and Zhigang Peng.

**6.6 Simpson Fund support for International Interns**
See section 5.1.6

**7. Long Range Planning Discussion**
The Board spent the morning of the 2nd day its meeting discussing NSF plans to integrate the SAGE and GAGE facilities into a single facility post-2023 that will be managed by a single entity. We discussed the La Piana Assessment Report and identified issues that will have to be addressed if IRIS and UNAVCO wish to pursue a corporate merger. Lucy Flesch, chair of the UNAVCO Board, and Chuck Meertens, Acting President of UNAVCO, joined the IRIS Board for these discussions. One product of the discussion was a list issues that will begin to be addressed by the joint IRIS-UNAVCO Negotiation Committee at their first meeting on Nov. 19th.

**8. Other issues**

**8.1 AGU plans**
The annual IRIS Membership Meeting will be held on Monday, December 9th, 2019 at the Children’s Museum (221 4th St), across the street from the Moscone Center. There will be a reception at 6 pm and the business meeting will begin at 7 pm. IRIS will have a booth in the Exhibit Hall.

**8.2 GAGE-SAGE Workshop in 2020**
The Board recommended Karen Fischer (alternate Amanda Thomas) and Mike Brudzinski (alternate Heather DeShon) for the workshop organizing committee.

**Action Item (1911-06)** – John Taber will contact these nominees to see if they will serve on the GAGE-SAGE Workshop Organizing Committee.

**9. Board Executive Committee Session**
The Board met in Executive Session from 12:00-2:45 pm. Topics included:
- Response to CoCom Issues for Board
- Presidential Search Update
- Dates for Spring BoD meeting (April 15-16, with a pre-meeting retreat on April 14th).
- Merger issues to be addressed by the joint Negotiation Committee