IRIS Board of Directors pre-meeting Webinar

Tuesday October 29
2 PM EDT

In preparation for
BoD meeting
November 4-5, 2013
UCLA
Los Angeles CA
Board Webinar  
October 29, 2013

• Webinar Purpose  
  – Streamline agenda for LA BoD meeting  
  – Status and overview of current activities  
  – Finalize agenda topics for the BOD meeting  
  – Replaces “President and Chair Report”  
  – Model for future webinars and community engagement?

• CoCom Meeting - Oct 31  
  – Report from recent Standing Committee meetings  
  – Review program and cross program activities  
  – Review SAGE tasks, activities and budget  
  – Develop issues to send to Board

• Board Meeting – Nov 4-5  
  – Board and Senior Management Team only  
  – Receive and respond to CoCom and Program issues  
  – Strategic Planning  
  – SAGE Status and call with Greg Anderson  

  *Briefing books to be sent out this week*
Board Webinar

• Webinar Format
  – Try to keep to one hour
  – Primarily informational - limited time for Q&A or details
  – Quick summaries and pointers to documents on website or in DropBox
  – Refer to documents & review Webinar PPT prior to CoCom or BoD meeting

• Protocol
  – Mute mikes
  – Use VoIP if possible
  – Use” chat” function if you wish to comment – or speak up.
  – E-mail comments or suggestions for BoD agenda items and/or requests for additional information to Brian or David

• Topics
  – Funding Status – SAGE and other awards
  – 2013 Meetings
  – Board Activities
  – Program Status – see DropBox for detailed reports
  – Board meeting and Agenda
Funding Status
SAGE Award

• SAGE Proposal (EAR + Polar funding)
  – First Year $27.620M
  – Total 5 Year $146.64M

  EAR

  $1.078

  Polar

  $5.74

  Total

  $28.698M

  $152.38M

• NSF Cooperative Agreement
  – Current CA $21,536,380
  – Total 5-Year $133,735,396

  -12%

• Expected First Year Funding
  – First Year $24.30M

  -12%

  EAR anticipated

  $0.85

  (100% Antarctic – 0% Arctic)

  Antarctic anticipated

  $25.15M

  2013-14 Total

  * expect Polar funding soon and EAR 2nd increment early in 2014
Funding Status
“SAGE Y1 Plan and Budget”

- Based on initial BoD May budget of $25M:
  - Cuts to
    - New Initiatives
    - Travel
    - IDS
- Reduced to NSF final target of $24.3M:
  - 4% decrease to major subawards
- Final adjustments to be made prior to request for NSF 2nd FY14 increment
- Table and notes in “SAGE Y1 Plan & Budget” on BoD website
Funding Status

% spent – All awards
as of 9/30/13

Percentage of Total Award Budget Spent as of 9/30/13

- 27-mo C.A.: 91.48%
- GLISN: 97.27%
- Grand Challenges: 42.46%
- UNAVCO Subaward: 45.43%
- USAArray O&M II: 97.13%
- CHILE MRI: 79.10%
- OMO: 39.89%
- State Dept.-GSN: 64.35%
- Vulcan: 0.00%
- REU Award 2012-2017: 98.96%
- PASI: 98.76%
- JPL/NASA: 98.76%
- GLISN2: 98.76%
- SAVI: 98.76%
- EarthCube: 0.01%

9
Funding Status
Cooperative Agreements
as of 9/30/13

IRIS Cooperative Agreements
Expended vs Unexpended Funds Available

OMO

USArray O&M-II

27-month Core.

$0 $10 $20 $30 $40 $50 $60 $70 $80

Expended
Unexpended

Millions
# Funding Status
## New Awards - 2013

<table>
<thead>
<tr>
<th>Title</th>
<th>Funding Source</th>
<th>PIs</th>
<th>Funding</th>
<th>Start Date</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAGE</td>
<td>NSF/EAR</td>
<td>Simpson/Taber/Aher</td>
<td>$24,300,000</td>
<td>10/1/13</td>
<td>5 years</td>
</tr>
<tr>
<td>OMO 2013-14</td>
<td>NSF/OCE</td>
<td>Simpson/Woodward</td>
<td>$7,182,249</td>
<td>2/1/13</td>
<td>1 year</td>
</tr>
<tr>
<td>IRIS Core (final 27 month)</td>
<td>NSF/EAR</td>
<td>Simpson</td>
<td>$2,987,500</td>
<td>7/1/13</td>
<td>3 months</td>
</tr>
<tr>
<td>CEUSN (USArray supplement)</td>
<td>NSF/EAR</td>
<td>Simpson/Woodward</td>
<td>$2,452,048</td>
<td>10/1/13</td>
<td>3 years?</td>
</tr>
<tr>
<td>EarthCube Building Blocks</td>
<td>NSF/EAR</td>
<td>Ahern</td>
<td>$1,982,034</td>
<td>9/1/13</td>
<td>2 years</td>
</tr>
<tr>
<td>Polar - 2013-14 Field Season</td>
<td>NSF/PLR</td>
<td>Simpson</td>
<td>$1,156,700</td>
<td>4/29/13</td>
<td>6 months</td>
</tr>
<tr>
<td>GEOICE MRI</td>
<td>NSF/ANT</td>
<td>Woodward/Gridley</td>
<td>$636,426</td>
<td>9/12/13</td>
<td>3 years</td>
</tr>
<tr>
<td>AON/GLISN2</td>
<td>NSF/PLR</td>
<td>Simpson/Anderson</td>
<td>$203,680</td>
<td>9/1/13</td>
<td>5 years</td>
</tr>
<tr>
<td>ES Nat Mtg(USArray supplement)</td>
<td>NSF/EAR</td>
<td>Simpson</td>
<td>$182,655</td>
<td>4/26/13</td>
<td>5 months</td>
</tr>
<tr>
<td>SAVI</td>
<td>NSF</td>
<td>Ahern</td>
<td>$138,192</td>
<td>9/12/13</td>
<td>3 years</td>
</tr>
<tr>
<td>REU Interns</td>
<td>NSF/EAR</td>
<td>Taber/Hubenthal</td>
<td>$125,997</td>
<td>6/1/13</td>
<td>1 year</td>
</tr>
<tr>
<td>NASA Insight</td>
<td>JPL</td>
<td>Taber</td>
<td>$99,983</td>
<td>6/5/13</td>
<td>6 months</td>
</tr>
</tbody>
</table>
Funding status
Budgets, Spending Plans and Tracking

• SAGE CA requires quarterly financial reports
  – Structure based on WBS elements in proposal and budget plan

• SMT discussions on Spending Plans and Tracking
  – Based on SAGE Yr1 Plan and Budget
  – Programs working with Financial Services to develop time-phased and track-based spending plans
  – Tracked by FS on a monthly basis for Programs and SMT
  – Reports quarterly to NSF, BOD and CoCom with variances and explanations for variances > 10%
Funding Status
Unrestricted funds

Investment Account $1,230K
Additional Unrestricted funds
  Bank Account ~$400K
  Expected SubSea ~$890K
Total Unrestricted ~$2.5M

Still awaiting NSF decision on Management Fee of $75K/year

Morgan Stanley - IRIS Portfolio Account Balance
12/31/12 - 9/30/13

1,200,000 1,250,000 1,300,000 1,350,000 1,400,000
1,100,000 1,150,000 1,200,000 1,250,000 1,300,000
1,000,000 1,050,000 1,100,000 1,150,000 1,200,000

Dec-12 Jan-13 Feb-13 Mar-13 Apr-13 May-13 Jun-13 Jul-13 Aug-13 Sep-13

$1,230,665 $1,185,376 $1,155,047 $1,169,388 $1,161,904 $1,118,908 $1,112,878 $1,113,431 $1,093,462
## IRIS Meetings - 2013

<table>
<thead>
<tr>
<th>Dates</th>
<th>Meeting</th>
<th>Location</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 14-22</td>
<td>Metadata Workshop/ASI Workshop</td>
<td>Kuwait City, Kuwait</td>
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<tr>
<td>Jan 31 - Feb 1</td>
<td>IRIS BoD</td>
<td>Dallas, TX</td>
<td>26</td>
</tr>
<tr>
<td>Jan 24-25</td>
<td>Instrumentation Meeting</td>
<td>Albuquerque, NM</td>
<td>6</td>
</tr>
<tr>
<td>Feb 18-19</td>
<td>PCG US/Canada/Alaska Meeting</td>
<td>Sidney, BC, Canada</td>
<td>40</td>
</tr>
<tr>
<td>Feb 27-28</td>
<td>OBSIP Oversight Committee</td>
<td>Washington, DC</td>
<td>18</td>
</tr>
<tr>
<td>Mar 4-8</td>
<td>Maule Earthquake Workshop</td>
<td>Concepcion, Chile</td>
<td>138</td>
</tr>
<tr>
<td>Mar 18-19</td>
<td>GSN Standing Committee</td>
<td>Albuquerque, NM</td>
<td>17</td>
</tr>
<tr>
<td>Mar 21-22</td>
<td>Instrumentation Meeting</td>
<td>Boulder, CO</td>
<td>7</td>
</tr>
<tr>
<td>Mar 25-26</td>
<td>PASSCAL Standing Committee</td>
<td>La Jolla, CA</td>
<td>12</td>
</tr>
<tr>
<td>Apr 5-6</td>
<td>EPO Standing Committee</td>
<td>Washington, DC</td>
<td>12</td>
</tr>
<tr>
<td>May 13</td>
<td>MT Workshop</td>
<td>Raleigh, NC</td>
<td>30</td>
</tr>
<tr>
<td>May 12-15</td>
<td>EarthScope National Meeting</td>
<td>Raleigh, NC</td>
<td>250</td>
</tr>
<tr>
<td>May 15-16</td>
<td>GABBA Workshop</td>
<td>Raleigh, NC</td>
<td>55</td>
</tr>
<tr>
<td>May 26-Jun 1</td>
<td>IRIS Intern Orientation</td>
<td>Socorro, NM</td>
<td></td>
</tr>
<tr>
<td>May 30-10</td>
<td>IRIS BoD</td>
<td>Washington, DC</td>
<td>26</td>
</tr>
<tr>
<td>Jun 13-14</td>
<td>IRIS BoD Retreat</td>
<td>Potomac, MD</td>
<td>9</td>
</tr>
<tr>
<td>Jul 14-25</td>
<td>PASI Workshop</td>
<td>Dominican Republic</td>
<td>35</td>
</tr>
<tr>
<td>Aug 6-9</td>
<td>USAArray Short Course (Intro)</td>
<td>Evanston, IL</td>
<td>20</td>
</tr>
<tr>
<td>Aug 12-16</td>
<td>USAArray Short Course (Advanced)</td>
<td>Evanston, IL</td>
<td>20</td>
</tr>
<tr>
<td>Sep 31</td>
<td>TA Symposium</td>
<td>Woods Hole, MA</td>
<td>60</td>
</tr>
<tr>
<td>Oct 1-2</td>
<td>TA All Hands Meeting</td>
<td>Woods Hole, MA</td>
<td>40</td>
</tr>
<tr>
<td>Oct 8-9</td>
<td>DS Standing Committee</td>
<td>LLNL</td>
<td>15</td>
</tr>
<tr>
<td>Oct 10-11</td>
<td>GSN Standing Committee</td>
<td>La Jolla, CA</td>
<td>13</td>
</tr>
</tbody>
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Recent Board Activities

• Governance re-structuring
  – Board Liaisons for Fall Standing Committee Meetings
  – Annual Calendar
  – New role of IDS
  – Science Committees and Advisory Council
  – IS Committee
• Strategic Planning
• Presidential Search
• NSF Cooperative Agreement
• SEG Annual Meeting Participation (details later)
• Letter to OSTP and OMB
• Board Elections (details later)
• Government Shut Down
Industry and SEG

- Presentations at Instrumentation Technology Symposium
  - Technology and instrumentation
  - CalTech work on Nodal Seismic data set from Long Beach
- IRIS Booth at SEG Meeting, Houston
- "Lunch and Learn" at SEG
  - Organized by Nodal Seismic, Fairfield and IRIS
- Possible Next Steps
  - Proposal for extended workshop in Houston, early 2014
  - Expand on the initial interactions with SEG related to education and outreach
  - Continue interactions with exploration equipment manufacturers exploring possibilities for “Large N”
  - Expand opportunities for Consortium wide software access
  - Begin planning for 2014 SEG Annual Meeting participation
Instrumentation Services

- **USArray 5 year O&M award completed on schedule and under budget**
  - Excellent management in all program areas: TA, FA, MT, DM, SO
  - “Under budget” in spite of flat funding the past three years
  - NCE in place for orderly close-out and completion activities

- **Recent workshops and symposia**
  - MT Transportable Array Siting Workshop
  - Arrays in Global Seismology – next steps???
  - Subduction Zone Observatory breakout session at ESNM – next steps???
  - TA Science Symposium

- **Funding developments**
  - CEUSN effort - ~$2.5 M ($2 M for year 1, increment of ~$0.5 M for year 2)
  - GLISN O&M - ~$1.3 M (over five years)
  - GEOICE MRI - ~$3.2 M (over 3 years)

- **Key opportunities in coming months**
  - Large N Working Group fully mobilizing
  - Workshop on “Active Source Data Management” scheduled for January 2014
  - Implementing IS governance structure
  - Industry engagement
  - “EarthScope Decade” celebration – joint with ESSC, PBO etc.
Portable & Polar Support Services

• Field programs
  Portable
  • Currently, ~55 active experiments with ~655 broadband instruments currently active in field
  • Two active source experiments were either canceled or delayed, ViCANAS and SEISORZ
  • Activated six-month Chihuahua RAMP with UTEP to investigate recent seismic activity
  • Continuing sensor deployment experiment in Alaska (Poker)
  Polar
  • Scrambling to provide support for revived 2013-14 Antarctic field season
    – First team left for Antarctica on 28 October 2013
  • GEOICE kickoff meeting completed (joint with CWU) - GLISN O&M funding in place

• Instrument Center
  • Sue Bilek now PI for new PIC award as of Oct 1
  • Developing improved budget and task tracking for merged awards
  • Developing IRIS-level policy and PIC procedures for Import/Export

• Strategic Planning
  – Successful 1.5 day meeting following PAS-SC meeting last week - report will be provided later

• New Technologies
  – Interactions with traditional and non-traditional manufacturers

• Links with Industry
  – Participation in SEG meetings and “Lunch and Learn”
  – Possible collaboration with Nodal Seismic experiments in Texas
  – Other possible industry interactions, pending follow up
GSN

- **Next Generation System Rollout**
  - 131 of 153 stations upgrade (117/131 core stations)
  - China completed this year - Russia to be completed within one year

- **Quality Assurance System**
  - MUSTANG GSN metrics nearly complete
  - LASSO beta under review by IS and GSNSC/USGS
    - Data user interface (outward facing client interface)
  - USGS-Data Quality Analyzer (DQA) nearing completion
    - Network Operators (inward facing QC interface)

- **Borehole Sensor Procurement**
  - Solicitation this winter - sensors in hand for test/evaluation ~1 year

- **GSN Funding concerns**
  - Concerns with core capabilities
    - All equipment, projects and small subawards and initiatives removed
  - Now losing personnel at UCSD (field personnel)
  - Limits ability to seek external funding
  - Working on long-term strategies

- **GSN in Oceans**
  - SAGE funds removed for this, but will pursue through opportunistic interactions
  - Work with OBSIP steering committee and OMO/IS

- **Central Asia**
  - Losing II-ABKT station - Seeking replacement location in Uzbekistan
  - May be an opportunity to also reoccupy GARM
    - No funds in core for either of these – need to identify possible partners (hosts, DoE, etc)
• GSN Review – by October 1, 2015
  – From Cooperative Agreement:

  • "By the end of the second year of this CA, conduct a full external review of the GSN, including all associated subawards, and exploring alternative configurations, management approaches, and the possible scientific impacts. The review will be developed and carried out in collaboration with the USGS. The Awardee will keep the NSF Program Officer informed throughout the process."
USArray - TA

- Lower 48 completed!
- TA Symposium, Team Meeting & Celebration (9/31 – 10/2) in Woods Hole
- Preparations for Alaska operations and station engineering
  - Challenging - new risks and designs
  - Changes in staff and concerns for continuity
  - Continued work on Alaska permitting and station designs
- Interesting results from ANF and DMC on:
  - Low level seismicity
  - Full network noise performance
- Two USArray Short Courses (Intro and Advanced) in Aug at Northwestern

- CEUSN
  - $2M initial award + 0.46M “down-payment” for FY14
  - Significant new observational capability
    - Enthusiastic utilization is critical to ensure sustained funding

- Concerns about long-term funding commitment
  - Impacts on planning, implementation and end-state
  - For both TA-Alaska and CEUSN
    (see TA Report in BOD DropBox)
After first ten years of EarthScope/USArray: Questions for Board Consideration

Use of TA Data
Has utilization of TA data, particularly in advanced processing techniques, been above, below or at level expected?
What has been the scientific payoff?
Do we need to stimulate processing chores - or are organic efforts good enough?

Facilities and Large Projects – impact on you
Have large projects, such as USArray/TA, changed the way seismology is done at your institution?
How about long-term programs such as GSN, Portable, EPO?
Compare the merits for IRIS to engage and support either/both longer term.

Impact on Seismology
Has IRIS visibility changed in your state or nationally - for better or for worse?
Is it important that IRIS be visible or should the field of seismology be more prominent?
Is success in science proposals/research more important to you than visibility?
What should be the Consortium's role in regards to shaping seismology research and engineering with NSF?
Lower 48 – the final footprint!
CEUSN PLAN

Includes:

TA, Adopted, ANSS, GSN, Regional Net BB

Completion of re-install and re-constructs expected early in 2014

Virtual Network _CEUSN_ being created for all stations on map
DMS

• Auxiliary Data Center established at LLNL
  – Hardware installed, systems being configured, web services by end of 2013

• Versions of Web Services adopted by the FDSN
  – All DMC applications now moved to FDSN version
  – All known non-DMC applications also moved to FDSN Versions
  – COOPEUS- 5 FDSN data Centers in Europe have agreed to have FDSN web services running by end of 2013
  – First version of an IRIS Federator developed

• MUSTANG and QC
  – Metrics development mostly complete
  – Goal is to have _GSN complete for all time by end of this year
  – LASSO presently working with MUSTANG metrics

• New systems available
  – WILBER3 (WILBER II Deprecated)
  – PDCC with PASSCAL extensions delivered to PASSCAL
  – IEB moved to web services (EPO Development) and 3D

• Metadata workshop
  – joint with LACSA/IASPEI Regional meeting in Bogota in July 201

• Digital Object Identifiers (DOI's) for data set and experiment citations
  – Prototype system developed
  – coordinating with UNAVCO, European partners and FDSN
EPO

- Research Experiences for Undergraduates
  - 15 interns (8 female, 3 minority) - 14 posters and 1 oral presentation at AGU

- Undergraduate education
  - Grand Challenges Undergraduate Curriculum
  - Geoscience Fieldtrip at SACNAS National Conference - 50 students

- Early Career Investigators
  - 2 mentoring RFP awards granted

- IEB and 3DV Web interactive tool
  - Significant upgrade of original DMS code uses IRIS Web services
  - New 3D interactive browser – up to 5000 events
  - Can share links for social networking

- Teachable Moments
  - 12 Powerpoints created since last EPOSC meeting

- Animations
  - Collaboration with UNAVCO, CEETEP (Cascadia), and USGS
  - Three animations submitted to "AGU Cinema 2013"

- Seismographs in Schools
  - First full release of jAmaseis software planned for next week

- Publications
  - New IRIS booklet and Workforce trifold to appeal to industry audience
  - New IRIS electronic newsletter (organized by Ellen Kappel)
  - Rob Newman (DMC) as “Lead Technology Architect” part time at HQ
EPO – Outreach

• Professional development
  – 14 in-person professional development sessions of an hour or longer reaching over 400 teachers and informal educators

• Distinguished Lectureship
  – Five 2013 lectures presented or scheduled

• USArray Outreach
  – Open house at Transportable Array station in MD for federal agencies
  – Filming and/or broadcasting:
    • The Weather Channel, American Museum of Natural History, German PBS

• Booths
  – National Science Teachers Association April 11-14
  – Coalition for National Science Funding Reception May 7
  – American Association of Petroleum Geologists May 19-22
  – USGS Coalition Reception and Exhibition September 17
  – Society of Exploration Geophysicists September 22-25
  – NSF STEM Fair September 27-28
  – GSA October 27-30
International Development Seismology

• Advanced Studies Institutes
  – Advanced Studies Institute on Lithospheric Structure
    • Jan 19–22, 2013    Kuwait - in collaboration with Metadata Workshop
  – PASI - Site Response
    • July 15–25, 2013 Santo Domingo, Dominican Republic
    • “Bringing New Tools and Techniques to Bear on Earthquake Hazard Analysis and Mitigation”.

• ALMAS (Alliance for Middle America Seismology)
  – Meeting - July 26-27 – following PASI in Santo Domingo
  – Webpage initiated

• Advanced Studies Institute during 2014
  – Possible joint with DS Metadata Workshop in Bogota, Colombia

• Future PASI-like Activities
  – Asia connections with support from NSF, DOE, State Dept

• IDS Links with EPO, IS and DS
  – Best Practices
    • Short Course Software, Data submission, Affiliate training
  – Portable Deployments
  – Links to Subduction Zone Observatories and GABBA

• Committee Membership
  – Suggestions developed for joint members with IS, EPO, DS and USGS

• Foreign Affiliates
  – Review of criteria and benefits
2013 Board Election
Slate of Candidates

Chair for three-year term
Anne Meltzer, Lehigh

Director for two-year term
to fill position vacated by Anne Meltzer
Gabi Laske, UCSD

Director for one-year term
to fill position vacated by Matt Fouch
Kate Miller, Texas A&M

Two Directors for three-year - elected from:
Lee Liberty, Boise State
Jeff McGuire, WHOI
Beatrice Magnani, SMU
Doug Toomey, Oregon

Appointed by the Board:
Geoff Abers as Vice Chair

Election website to be released Nov 1
Ballot package sent to Member Representatives on Nov 5

Thanks to the Nominations Committee
Jeroen Tromp (Chair)
John Hole, Mike Thorne, Colleen Dalton, and Meghan S. Miller
Nov. 4-5 BoD Meeting
Key Topics

- SAGE Status and Call with Greg Anderson
- CoCom Report
  - Issues and responses
- Presidential Search and Transition
- Governance
  - SC membership and IS Committee structure
  - Science Committees & Advisory Council
- Outreach to Industry and SEG
- 2014 IRIS Workshop
- Strategic Planning
- Fundraising
Nov. 4-5 BoD Meeting
Agenda

• Award and Budget status
• CoCom Report
  – Program status
  – Issues for Board
  – SC Committee membership
  – Board liaison reports
• Executive Session I
  – Presidential Search and Transition
• Governance
  – SC membership
  – IS Committee structure
  – Meeting Calendar dates
  – Science Committees
  – Advisory Council
• Outreach to Industry
  – SEG, Instrumentation, Data, Education
• Fundraising
  – Investment and use of SubSea funds
  – Other fundraising
• Miscellaneous
  – HPC, Livermore
  – Nolet and MariScope
• Subcommittees Reports
  – Membership
  – Budget and Finance
  – SMT
• Meetings
  – Annual Membership Meeting
  – IRIS Workshop
  – EarthScope Ten Year Celebration
• Actions
  – Response to CoCom and SC's
  – Fundraising
• Executive Session II
  – Long term planning

Please e-mail comments or suggestions for BoD agenda items and/or requests for additional information to Brian or David