

COSMOS
Board of Directors Meeting Minutes
May 27, 2015
Conference Call

BOD Participants:

W. D. Iwan
J. Steidl
Donald Wells
C. B. Crouse
Jon Heintz
John Parrish
Marcia McLaren
R. Nigbor
Alan Yong

Other Participants:

R. E. Bachman (Director of Engineering Applications)
Claire Johnson (Office Manager)
A. Shakal (Guest)

Absent

W. U. Savage

Review and Approval of 13 November 2014 Minutes

The meeting was called to order at 9:07 am. The roll call was taken and the Agenda for the meeting was reviewed. Iwan requested that the BOD review the Minutes from the November 13, 2014 Board Meeting. The Minutes were approved unanimously at 9:10 am.

President's Report: W. D. Iwan

Iwan reported on the Finance Committee Meeting that was held on 28 April 2015. Based on the Financial Review conducted by D. Bott, the COSMOS accountant, COSMOS is now financially stable in terms of the its operations. Two CORE members have decided to no longer be part of the organization. Despite the loss of these CORE members, the Review found COSMOS to be in good financial health. Iwan asked if any of the BOD members had any questions.

McLaren asked for clarifications regarding ACOE and USBOR status. Both entities have been contacted repeatedly via telephone calls and registered letters. Johnson noted that the original CORE members were recruited by Bruce Bolt. The retirement of J. Wright at the USBOR was significant. He was a key supporter of COSMOS. McLaren asked if they are still operating stations and how involved were they in COSMOS. Their involvement tapered off over the years, especially with the retirement of Wright. Wells has initiated contact with someone at ACOE and has been told that seismic issues are not a priority. The BOD has decided after several years of repeated requests to be active CORE members that they be "retired." Iwan noted that unofficially COSMOS would welcome them back if they were interested.

Proposed Workshop: A. Yong

Yong presented a proposal to the COSMOS BOD for the development of an international COSMOS guideline for site characterization using non-invasive active- and passive-source geophysical techniques. This proposal is motivated by current work performed by the European community, in particular, by the members of the InterPacific Project, who are developing a similar set of guidelines with funds from the European nuclear power industry. Prior to the 2015 SSA meeting, the co-PIs of the InterPacific Project approached Yong and asked if he could facilitate a forum to exchange information with U.S. developers and practitioners about the state-of-knowledge in non-invasive site characterization techniques. Together with Steidl and Nigbor, Yong cohosted a forum the day (24 April 2015) after the conference, which was attended by nearly 40 participants, including the major developers and practitioners of the non-invasive techniques, many which were initially developed in the U.S. Attendees agreed that there is a need to develop a set of international guidelines. Attendees also suggested that the co-organizers of the forum and the presenters should form groups consisting of committees to facilitate the guideline development. The COSMOS guidelines would not “reinvent the wheel” but would build on previous work (e.g., projects such as Site Effects assessment using Ambient Excitations, SESAME; and, NETwork of Research Infrastructures for European Seismology, NERIES) and would include chapters about best practices authored by the developers of each technique. An *ad-hoc* working group would be formed to facilitate the composition of draft guidelines that would then be reviewed and edited at a two-day workshop in December 2015, which would be a few months after the InterPacific draft guidelines are due (Fall 2015). The InterPacific draft would be used as a starting point for the COSMOS drafts.

Comments:

Bachman asked who would fund the international participants. Yong replied that he expected the European participants to have funding for their travel expenditures through an E.U. proposal that is still under consideration; the Japanese and S. Korean practitioners are already working in the U.S. Bachman noted that should COSMOS fund travel expenses, these monies would be needed from reserves.

Heintz asked if the Europeans had already developed such guidelines. Yong replied that earlier efforts were either incomplete or lost traction and that (more recently) blind tests conducted by the InterPacific Project had already taken place with three U.S.-based practitioners as key participants. Techniques such as Array Micro-tremor, MASW and SASW are part of the focus of the InterPacific Project, but other methods (iMASW, ReMi, etc.) that are popular in the U.S. (and in other countries) are not included. Until the recent InterPacific Project, no U.S. participants (or developers) have been involved in developing guidelines for non-invasive techniques. For example, there are currently no guidelines in the U.S. for applying the HVSR or any other non-invasive techniques. SESAME, a guideline for the use of the HVSR technique was developed by key members of the InterPacific Project and has been widely used in Europe, e.g., typical geotechnical reports often copied (verbatim) the SESAME recommendations (checklists) in support of their findings. It is hoped that these COSMOS guidelines would eventually become ASCE guidelines.

Heintz asked why input from the Europeans was necessary? Why not develop a guideline in the U.S? Yong replied that the scope of the document is naturally international because these techniques have been applied worldwide and that

practitioners everywhere will benefit from such a document. For example, a substantial amount of results from site-characterization studies applying non-invasive techniques cannot be evaluated as reliable because inexperienced practitioners (not developers) have been known to misapply these moderately complex techniques.

Heintz asked why standards haven't yet been developed and wondered if the methods were too new. Yong replied that SASW has been around for almost 50 years and the others (Array Microtremor, MASW, and ReMi) for more than 25 years. iMASW was introduced in 2011 and has proliferated in the mid to western U.S. in recent years.

Iwan asked for a more detailed breakdown of what exactly was being produced for this effort. Yong and Steidl responded that the group would draft a guidelines document, hold a workshop sponsored by COMOS and others to review the guidelines, and then produce COSMOS guidelines with international consensus.

McLaren wondered if the non-invasive methods help in reducing the uncertainty. Yong believes that guidance would reduce user-related error for practitioners who are not as knowledgeable as the developers. Moreover, many practitioners will only use a single method (cost factor), so they need to understand the pitfalls inherent in applying a single method for characterizing the variety of site conditions they encounter.

Nighbor and Steidl pointed out that this guidelines project will likely take place anyway, and it's an excellent opportunity for COSMOS to show leadership on a very timely and important topic.

A motion was made to approve the project. Parrish moved to support and Heintz seconded. There was no opposition and the project was approved.

Treasurer Report: D. Wells

The Balance Sheet and P&L for 2014 shows expenses less than expected. This was largely due to the Committees not spending their allocated funds. Presentation of the Treasurer report is in the BOD packet. The external review of 2014 by our accountants is included in the Board Packet; please see the letter from D. Bott, who reiterates that we are financially healthy and that our books are in order.

The 2015 Preliminary Budget was revised at the 2014 Fall Board Meeting on November 13, 2014.

Expenses for the committees are still uncertain. Many of these committees have not spent their allocated funds, so the \$20K total addition to the budget might not impact the bottom line for 2015 if the other committee allocations are not spent.

It is becoming increasingly difficult to solicit dues from organizational members. We have lost two major organizations in the last year: John Martin and Degenkolb. It was suggested to restructure the membership category for organizations and offer engineering and government organization booths at the Technical Session, providing free registrations as part of the booth fee. Also worth pursuing is developing a tiered membership like EERI, one that includes booth space and free Technical Session Registrations.

Regarding COSMOS membership, Wells asked the Board a number of questions: Should a Membership Committee be established to recalibrate organizational membership? Should there be a fee for a booth that covers the registrations? Membership is key to the organization.

Should we explore sponsorships of the Annual Meeting/Technical Session that will include membership?

There was a motion for COSMOS to provide the opportunity for sponsorship of the Annual Technical Session/Workshop (name TBD), and the opportunity for organizations—both governmental and private—to have booths. The actual cost of the sponsorship or booth fee to be determined by a benefit based on the current registration cost and number of registrations the institution/organization needs. COSMOS will also provide opportunities for sponsorship of the break refreshments as well on a case-by-case basis.

Discussion

Should sponsorship replace membership dues for institutional organizations? Explore offering organizations booths for a fee. Booth fees and sponsorship could replace registration fees for organizations. Bachman noted that high-level people at many organizations have left, and their successors are not interested in maintaining the previous membership. Johnson pointed out that COSMOS needs to offer organizations something that goes beyond personalities and the good will of high-level individuals.

Revised motion was seconded by Heintz, and the motion revised with input from discussions. The motion passed at 10:51 with no objections.

The final budget is to be voted on at the end of the meeting after all of the items are discussed in more detail.

BOD Nominees for 2015 Election: R. E. Bachman

Two members' terms end this November (2015); they include W. D. Iwan and R. Nigbor, who have both served for six (6) years. Nigbor is willing to serve an additional term. A Nominating Committee was established to devise a slate of candidates. Parrish (chair), McLaren, and Wells, with Bachman as *ex-officio*.

Director of Engineering Applications Report: R. E. Bachman

The 2014 Technical Session was a success. The topic was well received. Attendees felt that the room was too long and narrow, making it difficult to hear the presenters. Johnson has already contacted the hotel and has arranged for the same hotel for the 2015 Technical Session but in a much wider and longer room with a foyer.

The USGS three-year plan status report has been completed and sent to Elizabeth Lemersal of the USGS.

Bachman suggested that the BOD hold a strategic planning meeting, which could be folded into a three-year plan for the USGS. Bachman pointed out that the newer Board Members did not have the chance to participate in a one-day strategic planning meeting.

Comments:

McLaren and Wells agreed. Johnson suggested that it should be done prior to the fall BOD meeting so that recommendations for future initiatives can be voted on in November. Costs could be minimized by holding it at the RFS.

There was a motion to schedule and fund a one-day strategic planning meeting in early fall at the RFS. The motion was seconded by McLaren. There were no objections and the motion passed at 11:14 am.

Action Items: Status from BOD Meeting, November 2015: R. E. Bachman

A request by the U.S. Resiliency Council Support to support COSMOS was sent to Ron Mayes; see letter in Board Packet.

Bachman discussed with Heintz the possibility of collaborating with ATC on the concept of having a workshop related to building owners installing instrumentation, maintaining the instrumentation, and sharing of the recorded strong-motion data. Possible date of this workshop will be in 2016. Heintz pointed out that workshops need to be properly scoped out with a well thought-out purpose in order to target the appropriate audience. The Board congratulated Heintz on his recent promotion at ATC to Director following Chris Rojahn's retirement.

Bachman re-initiated contact with Julian Bommer to determine his availability as a consultant to COSMOS. Bommer declined, citing current commitments; see email exchange in the Board Packet). He will suggest names that could be useful in helping COSMOS promote its standards into international standards.

Bylaw Changes: R. E. Bachman

Bachman directed the Board Members to the Bylaws, which included editorial comments and changes subject to Board approval.

There was a motion to change the Bylaws to include electronic balloting for all elections. There were no objections and the motion was unanimously approved at 11:45 am.

There was a motion to delete the Affiliate Membership and have only Organizational Members.

Discussion

Such approval allows a representative of previous Affiliate Members to become a BOD member. The original designation of Affiliate Members was to eliminate the possibility of a conflict of interest on the Board. Not approving the motion leaves Affiliate Members as a different class of member, without the opportunity to serve on the board.

The motion was carried by a 5-2 vote.

Vice President Report: W. U. Savage

Savage was not able to attend the meeting. C. Johnson updated the Board on the casting of new medals as all previous Bolt Medals had been awarded. All three organizations approved the cost of casting of six additional medals.

International Committee Report: J. Steidl

The terms of reference for the Joint IAEE/COSMOS Working Group on strong-motion monitoring were recently sent to the IAEE president, but there hadn't been a response to date.

Action Item: Steidl to send suggestions for International Member to BOD.

VDC Tools Committee: 2015 Budget Needs: R. E. Bachman

The Tools Committee met at the USGS in Menlo Park on April 13, 2015. A small working group was formed to discuss what was needed initially and to layout the path forward for developing new tools. On May 6, 2015, this working group met to discuss these issues and it was agreed that a key initiative should be to improve the COSMOS converter. It was recommended that a budget of \$10K be allotted with a 2–3 month timeline to update the COSMOS converter so that it is compatible with the revised ISTI software engine. The Committee will meet again this summer to discuss implementing more advanced tools. This recommendations will be presented to the BOD at the fall Board Meeting.

A motion was made to increase the budget of the Tools Committee budget to \$11K; it was seconded by McLaren. There was no discussion, no objection, and the additional allocation was approved. The motion passed at 12:13 pm.

Report on the Standards and Guidelines Committee: A. Shakal

Draft Guidelines for the Instrumentation of Tall Buildings and Immersion Protection Recommendations were revised and submitted to BOD by Shakal via email, which were based on an email exchange of recommendations and suggested additions.

There was a motion to accept the *Draft Guidelines for the Instrumentation of Tall Buildings and Immersion Protection Recommendations* subject to review. The motion was seconded at 12:19 pm.

Discussion

There was discussion about whether the immersion protection guidelines should be a separate document given the importance of the subject.

There were no objections to that motion and it passed unanimously at 12:21 pm.

Action Item: Shakal to send final draft versions to Johnson.

Other Business and Approval of 2015 Provisional Budget.

There was no other business.

A motion was made to adopt budget with increase for Tools Committee to \$11K, an additional \$2K for a strategic planning meeting, and an addition \$20K for support of a workshop on guidelines for non-invasive site characterization. There were no objections, and the motion passed 12:25 pm.

Meeting was adjourned at 12:25 pm.