

# COSMOS

## Meeting of the Board of Directors

19 May 2011  
10:30 PM – 4:00 PM

PEER/Richmond Field  
Richmond, California

### Members of the Board

#### Present:

W. D. Iwan  
W. U. Savage  
D. Wells  
N. Abrahamson  
D. Dreger  
J. Parrish  
R. Nigbor  
J. Steidl

#### Absent:

D. Levis  
D. Yule

#### Director of Engineering Applications

R. Bachman

#### Office Manager

Claire Johnson

#### Guests

A. Shakal

W. Iwan called the meeting to order at 10:30 am. The Minutes of the 18 November 2010 Board Meeting were reviewed.

**Motion was made by W. Savage to adopt the Minutes. Motion was seconded with no objections and unanimously approved at 10: 35 am.**

#### 1. President's Report—W. Iwan

There was no official report. Iwan reported that despite the economy and the loss of a couple of institutional members, COSMOS is doing well.

## **2. Director of Engineer Applications' Report—R. E. Bachman**

Bachman reported on the 2010 Technical Session. There were a total of 114 participants, and the Session was successful. Last year's fee structure was designed so that for the first time revenue exceeded expenses, a new milestone for the Technical Session. This was to be discussed in more detail when N. Abrahamson arrived. There was a query by Steidl about continuing education credits. He suggested that since PEER is a sponsor of the Technical Session that COSMOS use their process.

**Action Item: C. Johnson to explore if it is possible to use our association with PEER to offer continuing education credits for attendees.**

Next year's Technical Session will not be located at the Clarion in Millbrae because they are shutting down for renovations. Parrish noted that there is currently a ban in place for state employees regarding travel and attending conferences. If the ban remains in place, this would mean that state employees might not be able to attend meeting. Johnson noted that a sizable number of attendees are state employees—from the Department of Water Resources and the California Geological Survey. It was suggested that if the ban was still in place come November that COSMOS offer state employees a discounted price so that they could still attend.

The GVDC project was completed on 30 April 2011. Currently, there are no other on-going grants or contracts, with the exception of the current CGS project to fund the Technical Sessions every year.

Iwan asked if there were any future project plans in the works. Bachman did a recap of previous projects, and there was a brief discussion of the long-term planning meeting and possible projects discussed in that meeting. Wells asked what is the COSMOS mission and how do we view COSMOS?

Parrish noted that early warning systems is currently a hot topic, and he thinks that this advocating for early warning systems is an area that COSMOS should be involved in. Are the current sensor types sufficient for doing early warning at the M7-M9 range? What new types of sensors could be developed to facilitate the warning capabilities at this range of earthquakes? Example: the earthquake threat region size is very different between a M7.5 and M9, as was seen in Tokyo. Nigbor suggested COSMOS not being involved in Early Warning, but instead Early Response. He suggested proposing that COSMOS host a workshop on early response. Nuclear disasters from damaging earthquakes might be another topic for potential funding of activities. Data sharing from free-field data at nuclear power plants should be explored. International activities were also possible topics for future projects. This discussion was tabled until later in the meeting.

## **3. Treasurers Report—D. Wells**

Attachment 1 showed the approved budget, and Attachment 2 the actual expenses versus budgeted. The bottom line was that there was a \$15K loss for the previous fiscal year. This was primarily due to timing of CGS funding and the loss of a couple of institutional members.

Johnson noted that she had contacted John A. Martin and Digitexx several times regarding membership but did not receive a response back. Iwan said that he would contact them directly this year if they did not re-up for 2011. Iwan reported that he had been in contact with D. Levish of the Army Corps of Engineers, and has been assured by Levish that COE will provide funding for this year and last year.

Wells reported a loss of about \$1K overhead due to close out of contract with Caltrans for GVDC since they didn't spend out the full amount and funds had to be returned to Caltrans.

Next there was a discussion of expenses budgeted for the COSMOS committees that were not spent out in 2011. Although positive from a financial perspective, not so from the perspective of attaining specified goals. The tasks of the COSMOS Working Committee and the CESMD COSMOS Advisory Committee were discussed, and it was reiterated that there was no need for funds for the CESMD COSMOS Advisory Committee. The Working Group and Tools Committee were one and the same, both financially and in terms of their goals. The Working/Tools Committee should be allocated funds on a yearly basis to fund their activities. This Committee has been inactive because the VDC integration has not been completed. Based on a recent conversation with C. Johnson, the chairman of this Committee, C. B. Crouse, did not anticipate needing funds for 2011, but would like to be considered in the 2012 budget.

Essentially, there was a loss of ~\$14K (net income) versus the planned loss of ~\$9K. The Balance Sheet showed ~\$204K of funds in the bank and outstanding dues, and other receivables that were due in 2010 but remained outstanding (2010 dues from FEMA and COE). Wells noted that continued losses on this scale cannot continue.

Attachment 3 was the review by independent accountants. COSMOS remains in good financial shape, and according to our accountant, D. Bott, COSMOS is in better financial shape compared to a number of nonprofits in this current economic environment.

Attachments 4, 5, and 6 had already been discussed as part of the discussion of Attachment 2. Shown in Attachment 6, the new \$40K contract with California Geological Survey was signed for two years of funding.

Attachment 7 contained the 2011 proposed budget. The anticipated income will not change that much although income from Membership was lower than 2010 budget. Johnson has instituted a new Paypal option for membership, which will be available on the COSMOS website. The Technical Session was budgeted at the same level as last year, although hotel expenses may be different since location will change.

On the expenses side, it is planned that the Technical Session will operate at break even, with the exception of costs for producing the report. A new person to handle the Technical Session report needs to be recruited at \$1K expense. The CESMD COSMOS Working Group will not have any costs for this year; therefore, the \$4K currently allocated will be removed. Total ordinary income reflects a ~\$1400 loss. If the interest income from the bank accounts is included, then the loss will only be ~\$645.

Action on the Preliminary Budget for 2011 was postponed until the end of the meeting.

Attachment 8 contained the Minutes of the Finance Committee Meeting held in February 2011.

Meeting broke for lunch at 12:05 pm.

Meeting reconvened at 12:40 pm.

#### **4. Board of Directors Nominees for 2011 Elections— R. E. Bachman**

The current BOD members whose terms are ending in November 2011 are Abrahamson and Steidl. Both are eligible to serve a second term. A discussion of additional board member to fill out the 11 potential positions followed. Currently there are only 10 Board members with three potential positions available. Potential candidates are C. B. Crouse, and possibly an international candidate (John Clinton at ETH was mentioned). A member from Japan would also be timely. The nomination process was tabled until Abrahamson joined the meeting.

#### **5. Location and Date for next BOD Meeting and Technical Session—R. E. Bachman**

The venue for the past two years, the Clarion at SFO, is closed for a year-long renovation, necessitating finding another location. Tentative dates for the Board Meeting and the Technical Session are 3 and November 2011, respectively. Costs for the Technical Session may be higher, but this will be factored into the attendance fee. Other hotels in the proximity of the airports will be researched.

**ACTION ITEM: C. Johnson to find new location with the 3 and 4 November 2011 date.**

#### **6. Vice President's Report, Bruce A. Bolt Medal—W. U. Savage**

Kojiro Irikura was recommended as this year's nominee and was selected by all three organizations. He received the award at the SSA Annual Meeting in Memphis. After the recent earthquake in Japan, K. Irikura asked if he could decline the award. He felt guilty about receiving the award as he believed that the seismological community in Japan had let down their people down. Paul Somerville discussed this with Dr. Irikura, and he was persuaded to accept it. Dr. Irikura's acceptance speech at the SSA meeting was very heartfelt and emotional, and he received standing ovation at the SSA meeting.

The general feedback was that this year's international recipient reflects well on COSMOS' goal of reaching out to the international strong-motion community.

At the SSA Board meeting there was a request regarding clarification for nominations that had not been selected for prestigious awards and medals. The SSA Board passed a statement deciding that (1) nominations for SSA-only medals need to be resubmitted annually. They also said that (2) nomination committee members may encourage those that have made nominations previously to resubmit their nomination if they so choose; and (3) that if the nomination appears valid but the supporting material is inadequate, that the nominators shall be encouraged to supply additional supporting material. SSA wondered if COSMOS and EERI might also adopt the same rules for the Bolt Medal.

**A motion was made to have the Bolt Committee adopt the same set of rules. Motion was seconded with no objections and unanimously approved.**

#### **7. Report on CESMD—J. Parrish and A. Shakal**

As COSMOS' representative to the CESMD, C. B. Crouse attended the last CESMD Advisory Committee meeting. Parrish reported that the conversion of VDC from a MAC to a PC platform will be finished by ISTI by July 2011. The completed conversion will not include the loading of new data. Additional manpower will be necessary to do that. Chris Stephens at USGS has been receiving data from recent significant earthquakes worldwide that needs to be loaded. Automation for worldwide data is possible, but will take a full time person to make this happen, and to keep up with current data.

The current status of the NSMP at USGS was discussed. The NSMP is now two groups with the major people being Joe Fletcher, Chris Stephens, and Kent Fogleman who are overseeing the structural and ground Instrumentation. Erol Kalkan, M. Celebi, and Jim Smith are overseeing the technicians. Savage noted that there are only 4 USGS members of COSMOS and all 4 are emeritus.

**ACTION ITEM: J. Steidl to draft letter for W. Iwan to send to USGS requesting that they abide by their original commitment to fund a technician to bring the VDC up to date once the transition is complete.**

The CESMD has new records coming in from Spain, Japan, and New Zealand. Nigbor noted that Volume 1 data (uncorrected data), especially for near-field records, needs to always be included. Savage noted that the USGS at Golden, Colorado, is accessing strong-motion records to feed Pager. It would be good to coordinate with them so that only a single contact at the USGS works with the international community.

#### **8. Update on the COSMOS Website and Viability of Web-Ex—C. Johnson**

The website has now been updated so that the membership can update their dues via Paypal. After discussions with PEER, they are more than happy to host the COSMOS website for free on their servers.

**Action Item: Johnson to obtain quote from PEER on costs of transferring the COSMOS main webpage to the PEER server.**

Johnson researched the cost of using Web-Ex for Board of Directors' meeting and the Board concluded that it was too expensive (\$45/mo plus \$1/min per user). PEER does have Web-Ex in the conference room COSMOS uses for the Spring Board meetings, however, PEER would charge for usage. Skype is also a possibility.

#### **9. Report on International Committee, NERIES, ESG4 meeting in August, 2011.**

Steidl presented to the BOD a draft MOU and cover letter for agreements between COSMOS and international agencies. These documents were discussed with the general feedback that disclosure of who is operating the actual VDC is important.

Steidl plans on attending the ESG meeting in August. This meeting will have an international contingent, and Steidl proposed that COSMOS host a strong-motion forum and a dinner using the funds budgeted for the International Committee for 2011.

Steidl suggested that COSMOS should increase the number of international participants within COSMOS, including international participation in all levels of membership. The Board agreed to host international forum dinner at ESG4 meeting, but not to provide travel subsidies. At this forum Steidl will announce that COSMOS is expanding its core membership (and other levels of membership) to the international community. The MOUs will be presented at the international forum. At this forum, COSMOS' recommended standards development will be discussed with international community.

**Action Item: J. Steidl to host international forum and dinner at ESG Meeting.**

#### **10. DVD Committee Report—D. Dreger**

Nick Gregor, Jennie Watson-Lamprey, and Dreger met to discuss a web-based instructional module for selection of strong-motion records. It is planned to have an undergraduate student work on a mock up of this. How to select records for engineering applications is still a hotly debated issue. The instruction modules will provide background for the three different methods for selecting records, with commentary about the strengths and weaknesses of each. A summary of COSMOS Technical Sessions might provide necessary background. This project could be proposed to an external agency for additional funding.

**Action Item: Dreger to develop a draft proposal for funding this project**

#### **11. Report of the Standards Committee—A. Shakal**

Updates to the recommended default accelerograph parameter settings have been made, using 0.5g as a trigger level as suggested by C. B. Crouse. Dreger suggested that the post-event time should be even larger for subduction zone monitoring.

Updates to the site characterization recommendations were as follows: Site characterization of strong-motion site conditions. It is useful to have borehole information in addition to velocity that also includes a geologic boring log.

The question arose if COSMOS should use the standards as a way to provide a quality measure for strong-motion recordings. Evaluating the available data with respect to the guidelines and encouraging people to adopt are two different things. It was recommended that COSMOS adopt the recommendations and post them on the website with a version number, with the understanding that they will evolve. This is also seen as a potential funded project for evaluation of existing strong-motion data.

**Steidl motioned to adopt these revised guidelines. Motion seconded by Parrish with no objections and unanimously approved.**

## **12. 2011 Technical Session Program**

Abrahamson proposed that COSMOS shift focus and this year's program deal with subduction zone earthquake motions. It was suggested that given the seismicity of the area, COSMOS should consider moving the Technical Session up to Seattle. Abrahamson countered that there is more subduction zone expertise in Bay Area; therefore, it makes sense to keep the Technical Session here. The experts in Washington will still come down to Bay Area. In an email exchange with Johnson, Crouse suggested adding a few topics to the Session, such as the effect of duration on structural response and effect of duration on dams.

Other topics might include what have we learned from the recent subduction zone earthquakes Chile and Japan. How do the models fit the motions? What are the implications for code provisions on new insights gained from these earthquakes? Are there shortcomings in the current code?

A query arose whether we should propose to NSF, NRC, and/or PG&E for additional funding to bring in international participants.

## **13. New Initiatives**

**2011 SMIP Seminar:** Iwan noted that because of recent restrictions where state employees can't travel nor can they host conferences, could COSMOS host the 2011 SMIP Seminar? COSMOS could be the official host, relieving CGS of petitioning for permission to host conference.

**Motion was made to approve the concept of COSMOS to host the SMIP 2011 seminar, pending the executive committee's final approval. Motion was seconded with no objections and unanimously approved.**

**2012 WCEE Lisbon:** Iwan asked if the Board was interested in once more hosting a strong-motion forum at the WCEE in Lisbon in 2012, similar to what 2008 in Beijing.

**Motion was made to investigate costs associated with COSMOS' participation in the 15WCEE, including holding the international forum, and staffing an exhibitor booth. Motion seconded with no objections and unanimously approved.**

**COSMOS Co-sponsor of IRIS Instrumentation Symposium:** Nigbor suggested that COSMOS be a co-sponsor of the next IRIS instrumentation symposium in two years. The Board noted the request and it was tabled until the next Board Meeting.

**Elections: Board Nominations:** President Iwan queried Board member J. Steidl if he would serve another term on the COSMOS BOD. Steidl has agreed to serve if elected. President Iwan queried Board member N. Abrahamson if he would serve another term on the COSMOS BOD. Abrahamson was willing to serve if elected but he would prefer to have someone else take the board position. He would still be involved in the Technical Session and Annual Meeting. He suggested several potential candidates: K. Wooddell (at PG&E), J.

Lamprey-Watson, or N. Gregor (at Bechtel), John Adams (of Canada), Alan Yong (of USGS), or someone to represent the concerns of the Central or Eastern United States.

**Action Item: R. Bachman and R. Nigbor were selected as the Nominating Committee to recommend a Board Member to replace N. Abrahamson.**

**GVDC:** Based on the presentation from Cliff Roblee of Caltrans at the meeting of the Finance Committee in February 2011, the members of the Finance Committee recommended that COSMOS did not have the financial resources to take on such a commitment. The Board concurred with their recommendation.

**COSMOS Oversight of PEER Project:** PEER is looking for COSMOS to be a project manager to get subcontracting work that PEER is interested in funding. Bachman and Johnson have agreed to work with Abrahamson and Y. Bozorgnia of PEER to hammer out details.

**Motion to approve 2011 preliminary budget was made. Motion seconded with no objections and unanimously approved at 10: 35 am.**

**Meeting adjourned at 4:00 pm.**