

# COSMOS

## Board of Director's Meeting Minutes

12 November 2015

Crowne Plaza Hotel  
Burlingame, California

### Attending

W.D. Iwan  
W.U. Savage  
J. Steidl  
D. Wells  
R.E. Bachman  
C.B. Crouse  
J. Heinz  
C. Johnson  
J. Parrish  
M. McLaren (arrived at 3:10 pm)  
A. Shakal  
A. Yong

### Via Phone

R. Borosc hek  
R. Nigbor

### Review and Approval of 27 May 2015 Minutes

The meeting was called to order at 2:40 pm. The Roll Call was taken and the Agenda for the meeting was reviewed. W. D. Iwan requested that the BOD review the Minutes from the 27 May 2015 Board Meeting.

**W. U. Savage moved to approve the Minutes, J. Heintz seconded, and the Minutes were approved unanimously at 2: 47 pm.**

### BOD Election Results

Results of the balloting for the 2016 Board of Directors: there was unanimous approval of BOD candidates from 16 of the 32 COSMOS members. A discussion of the election process followed with suggestions on how to increase participation of the membership. One suggestion was to have the BOD call members and urge them to vote.

### President's Report: W. D. Iwan

Iwan reported that based on the 2014 Financial Review by Accountant D. Bott, COSMOS is now financially stable in terms of its operating expenses. Despite the loss of CORE members the Bureau of

Reclamation and the U.S. Army Corps of Engineers, COSMOS continues on its mission and has begun a number of promising initiatives in 2015.

### **Review of Annual Business Meeting Agenda**

The Agenda for the Annual Business Meeting was reviewed by the BOD. The Agenda included several new initiatives, and this meeting will ask members to provide feedback for strategic planning for 2016.

### **Review and Approval of Updated Bylaws**

The BOD reviewed changes to the Bylaws voted on at the Spring 2015 BOD meeting. These changes included removing the Affiliate class of membership, amending the Bylaws to include electronic balloting, and clarifying term limits for officers. These changes were incorporated and were presented to the BOD to be approved.

**Crouse moved to approve changes to the Bylaws, Savage seconded, and the Motion was approved unanimously.**

Additional changes to the Bylaws were introduced: change Article 4, Section 4 to remove “mailed ballots” from the Bylaws; (2) Change Article 5, Section 7(1) and 7(2) appear redundant and should be reviewed and updated.

**ACTION ITEM: Additions to the Bylaws will be presented at the Spring 2016 BOD meeting for discussion and approval.**

## **Director of Engineering Application’s Report: R. E. Bachman**

### **Technical Session 2015**

R. E. Bachman reported that he is anticipating over 100 participants to attend the Technical Session this year. It will take place at the same venue, but in a much larger room, with better audio/video support. This year’s Technical Session will be dedicated to improving the state-of-practice by educating participants in how to interpret the codes, and increase communication between the structural engineers, geotechnical engineers, and the ground-motion community. It was proposed that a simple survey be handed out to evaluate the effectiveness of the Technical Session and to determine the pluses and minuses of the event. Questions that arose included whether or not COSMOS should hold more of these sessions or should it remain a yearly event, and should COSMOS sponsor short courses. Bachman noted that codes are generated by both policy and engineering knowledge. J. Parrish suggested having the BOD meeting in the morning to be followed by a workshop in the afternoon, and then the technical session the following day. Bachman noted that part of the attraction for the Technical Session is that it is a one-day event given how busy many professionals are. Iwan would like BOD members to give some consideration into taking the material gleaned from the Technical Session as the basis for policy changes.

**ACTION ITEM: Develop a survey for distribution at the 2016 Technical Session, with a maximum of four questions.**

### **Long-Range Planning Meeting 20 October 2015**

A long-range planning meeting to discuss future direction of COSMOS was held at the Richmond Field Station on 20 October 2015. The status of current projects was reviewed: (1) draft guidelines on the instrumentation of tall buildings and inundation protection for instrumentation are close to being completed: (2) the COSMOS converter tool for the VDC is close to being completed, and it is planned to be released early in the first quarter of 2016. The Workshop on Non-Invasive Site Characterization and Guidelines Development is still in the planning stages, but a meeting with key participants will be held

on 11 December 2015, with a special session at the upcoming Seismological Society of America Annual Meeting in April 2016.

## **Treasurer's Report: D. Wells**

Wells noted that COSMOS was in a stable financial position for 2015, with some resources available to support new initiatives. USGS has restored their funding level to the \$20K level of previous years. Membership continues to decline at both the institutional and individual category. That said, the Technical Session continues to be well-attended and self-supporting. Two new initiatives were begun in 2015: converter software for the COSMOS VDC and the Site Characterization Project. As of 9 November, the 2015 budget shows a tentative loss of \$10K. Not all monies allocated to Special Projects were spent, which includes the \$5K allocated for a consultant to put together the draft of an international COSMOS standard. This does not include additional funds for the Converter project as that project required additional funds not budgeted in 2015 for a total of \$10,750. Also, an additional \$2K was allocated for the site characterization project to fund a kick-off meeting in December 2015. Additional support is being sought from PG&E for this project.

### **Discussion**

R. Boroschek noted that for some countries, guidelines for metadata may be difficult to meet. Consideration should be given to those developing countries that cannot afford to do significant instrumentation. COSMOS could provide guidance on limited instrumentation and how to benefit from the data that's being recorded. There was some discussion on how to neutralize the data so that the specter of liability is somewhat mitigated. COSMOS will explore convening a Special Session at the WCEE in Chile in 2017 that discusses instrumentation of buildings/structures and use of the data on a global scale.

**ACTION ITEM: Boroschek has been tasked with developing a list of key considerations for COSMOS guidelines and standards that are of relevance for international standards.**

A summary of the proposed 2016 budget was presented, with a projected loss of \$21,200, with \$15K allocated for the site characterization project for several meetings planned for 2016. Even with these projected expenses, there remain monies to support new initiatives. The preliminary budget shows an income of \$67,000 and expenses of \$85,000. As mentioned above, extramural funding for the Site Characterization and Guidelines Project will be sought in 2016.

Approval of the preliminary budget for 2016 will be tabled until the conclusion of the Board Meeting.

### **Review of Action Items from Long-Term Planning Meeting**

Per the minutes of the Long-Term Planning Meeting, twenty action items were identified. These action items were broken down as follows:

**Outreach:** getting more involvement/organizational membership in COSMOS (#'s 3,4,7,9,16,17,20; and tangentially #10/11)

**Guidelines:** revision of older guidelines and development of new guidelines (#1,2,5,10,11,15,16,18)

**Tool Activities;** (#12,14)

**COSMOS Management:** (#6,13,21)

It was suggested that sub-committees headed by various Board Members be formed to ask general membership at the meeting tomorrow to participate in this sub-committee activity.

## **Report of Vice-President and Update on Bruce Bolt Medal: W. U. Savage**

Savage reported that this year the committee received four good nominations, securing future nominations. Based on the nominations, Roger Borchardt was selected as the 2016 recipient based on his work with record processing and site factors to site classes to  $V_{S30}$ , the NSMP, GEOS, and finally as a COSMOS VDC advocate.

**Savage moved to approve R. Borchardt as the Bolt medalist for 2016, seconded by McLaren, and approved unanimously at 5:45 pm.**

## **Status Update on COSMOS Guideline for Site Characterization and Guidelines Project: A. Yong**

A. Yong directed the BOD to the material included in the packet. There is a meeting schedule for 11 December 2015 to finalize the table of contents and authors. A Special Session will be held at the 2016 SSA meeting in April with a workshop to be held immediately following SSA and hosted at the UNR Seismological Laboratory. There are tentative plans to hold another workshop at the ESC meeting in September 2016 in Trieste for another special session and workshop. It is planning to release these guidelines at the 2017 16WCEE and published as a COSMOS guideline, and perhaps a summary as an SRL article.

### **Status of COSMOS Converter Tool Project: R. E. Bachman**

H. Haddadi of CGS and C. Stephens of USGS are scheduled to update the status of the Converter project at the Technical Session. It is anticipated it will be ready for formal release in March 2016

### **Status of International Committee Activities: J Steidl**

Development of the WIKI page now includes 12 networks, which is based on the participants of the 15WCEE. The IAEE/COSMOS ISMAC revitalization is still being worked out. Steidl will reach out to the incoming IAEE president, M. Nakashima, at the 16WCEE in Chile.

### **Status of Standards Committee Activities: A. Shakal**

#### **Inundation Protection Guidelines**

The current draft has the following directives: (1) keep recorders above the expected high-water line when possible; (2) define the water line; and (3) equipment below this depth should be designed against water intrusion to meet IEC 60529, IP68, and withstand immersion depth of 3 meters for 24 hours. The central recorder must be able to withstand flooding of its remote sensors without compromising its operation or any stored data.

#### **Discussion**

Questions by Board Members: Nigbor asked about stand-alone, free-field stations in coastal regions (i.e., Seattle, Port of Los Angeles, etc.); McLaren wondered if currents, velocity of flow, and changes in water pressure should be addressed. Parrish asked about 3-ft harbor waves that move in and out at 20 knots and run up on shore. Bachman noted that this is covered in the ASCE 7. Shakal corroborated Bachman's comment. Shakal suggested that this structural guideline for inundation specify that the recorder be placed up high in the structure. Heintz noted that real-time or near real-time recording is an alternate to meeting this specification.

**ACTION ITEM: Shakal to revise guideline and send draft to Board Members for review and approval via email with respect to real-time data or near real-time.**

### **Tall Building Instrumentation**

The draft guideline included the following revisions: a vertical floor sensor and a reference vertical sensor at the corner of the 6<sup>th</sup> floor were added. A reference to NSMP and CSMIP for guidance in installing sensors was added.

**Parrish moved to accept the guidelines; the motion was seconded by Wells.**

### **Discussion**

The ensuing discussion debated including separate provisions for mandatory versus voluntary installation. This issue was addressed by Boroschek regarding international guidelines and the financial onus such guidelines might impose on developing countries. What are the highest priority sensors for voluntary installations where cost is a factor? It was agreed that the most critical factor in all instrumentation is that it should be located strategically in the building in order to learn about its response. It was suggested that there be two sets of guidelines: one for use in countries where cost is a major factor and one in countries where cost is not a factor.

**A motion was put forth to have two sets of guidelines: Iwan, Wells, Steidl, Parrish, Bachman, and Shakal approved the motion; Crouse, Savage, Yong, and McLaren abstained; the Motion was approved.**

### **Review, Adjust, and Approve 2016 Initial Budget**

**Wells moved to approve the \$87K 2016 budget; Crouse seconded. There were no objections and the motion passed.**

### **Election of Officers: AMENDED**

This action was postponed until the Board dinner at which time W. Savage resigned as Vice President. R. Bachman put forward J. Heintz to replace Savage and a vote by the Board was taken, and Heintz was unanimously voted in to succeed W. Savage. Board voted to seat; other officers to remain. Iwan asked for a motion to approve minutes, Heintz moved, and Savage seconded. There were no further discussion or objections, and the Minutes were approved unanimously.

**Meeting was adjourned at 7:10 pm.**