

COSMOS

Consortium of Organizations for Strong-Motion Observation Systems

Meeting of the Board of Directors

7 February 2002

6:00 PM–7:30 PM

Westin Hotel

Long Beach, California

Summary prepared by W. U. Savage

Participants:

John Ake

Bob Ballard

Jim Davis

Farzad Naiem

Woody Savage

Carl Stepp

John Anderson

Bruce Bolt

Bill Iwan

Bob Nigbor

Tony Shakal

Ralph Archuleta

Allin Cornell

Claire Johnson

Maury Power

Mindy Squibb

President Bruce Bolt called the meeting to order at 6:00 PM. The meeting agenda is attached. Vice President James Davis, Secretary William Savage, Treasurer Maury Power, and Directors Robert Ballard, Wilfred Iwan, John Anderson, Farzad Naeim, and John Ake (for Jerry Wright) were present. Director Norman Abrahamson was absent. Executive Director Carl Step and Office Secretary Claire Johnson were present.

President Bolt reported on his participation in the 7 September 2001 ANSS National Steering Committee meeting as the representative of COSMOS. He provided some comments in an e-mail following the meeting, and there will be a formal report on the meeting published by the USGS in the near future.

Minutes from Last Meeting: The minutes of the previous Board Meeting on 2 October 2001 were reviewed. A correction was noted that Director Ballard has replaced O'Connor. President Bolt reminded Secretary Savage, Treasurer Power, and Director Anderson that they formed a Membership Committee. Director Anderson agreed to act a coordinator of the committee. Office Secretary Johnson suggested that the participants in the recent COSMOS workshops would be good candidates for membership.

President Bolt also announced that Bill Holmes has agreed to participate on the SAC.

Vice President Davis moved that the minutes be approved, and Director Ballard seconded. The motion passed unanimously.

Treasurer's Report: Treasurer Power reported that he, Executive Director Stepp, and Office Secretary Johnson had pursued finding a suitable accounting firm to establish COSMOS's books, provide financial reports, and review the accounting to be sure that the financial functioning of COSMOS was satisfactory as a non-profit organization. In mid-January an agreement was reached with the accounting firm of Markle, Stuckey, Hardison, and Bach [VERIFY NAMES], located in Larkspur. They were judged to have the most experience with similar organizations, such as EERI and CUREE. They have set up the accounting system, and Office Secretary Johnson has been making the entries. The annual cost for their services will be about \$1800, including \$600 for doing taxes and including the production of four quarterly reports, and a one-time cost of \$400 for installing the accounting system, the cost of \$250 for the software, and other incidental costs for advice and other services rendered. There was no agreement for doing an audit. Treasurer Power moved that the Board approve the selection of the accounting firm of Markle, Stuckey, Hardesty, and Bott. Director Naeim seconded the motion, and it passed unanimously.

Office Secretary Johnson has already begun working effectively with her contact in the accounting firm, Mary Weinberg. President Bolt suggested sending a note of thanks to EERI for their help over the past several years. Vice President Davis noted that he understood that the quarterly reports would provide a reconciled financial status, using accepted accounting practices. Director Iwan asked when an audit would occur, which is needed for some contracting agencies. Treasurer Power suggested that one might occur in 2 to 3 years, and noted that the cost would be about \$7000. Director Iwan noted there might be issues associated with appropriations not addressed by accounting procedures, but that are related to the structure of the organization. President Bolt noted that this matter would be covered later in the agenda.

Treasurer Power reviewed the Treasurer's Report provided to the Board members. He reviewed the distribution of dues-paying members for 2001, noting the new institutional and corporate members, and the resulting increase in dues income of about \$6000 over that in the year 2000. He reviewed the special contributions that have come in for workshops and other activities. The accounting for the recent Buildings Instrumentation Workshop is not complete yet, but will be in the range of \$25,000 to \$30,000. President Bolt noted that this illustrates the effective and efficient way that COSMOS works.

Office Secretary Johnson noted that the FEMA institutional membership at \$5000 should be listed, and will be paid using 2001 money from FEMA. Stu Nishenko mentioned that he plans to determine a new Point of Contact at FEMA when he visits there this February. Director Naeim suggested billing all corporations for their dues renewal. FEMA needs to initiate the membership as a purchase order, and cannot be billed, which is the case for many other public institutions. President Bolt noted that it is important for FEMA and other public institutions to receive the tangible products of COSMOS.

Treasurer Power reviewed the profit and loss statement. The CDMG membership comes in through the University, so it is not listed with the other directly paid Core member dues. The admin expense of \$475 is for taxes, and the meals expense is for the Annual Meeting. Under Consultants, moneys are noted for the services of Stepp, Nigbor, and Swift for the workshops and proceedings, as specified in the contracts for the workshops. The net income is about \$7700 plus the FEMA dues. Additional income of \$20,000 less expenditures is expected from 2001, as well. The balance sheet shows that the money in the bank is around \$62,000. COSMOS is in very good financial condition.

President Bolt asked if it is time to put more of the organization's funds into CDs. It was so moved and seconded, and passed unanimously.

Vice President Davis suggested that it would be timely to receive a quarterly report in advance of the next Annual Meeting. The Board also should get copies of the quarterly reports.

President Bolt raised the question of shifting the fiscal year of COSMOS. This needs to be done through a change in the By-laws. Treasurer Power noted that the CDMG funding comes on a July-to-June fiscal year, while the organization operates on a calendar year. It is very difficult to merge the two calendars. President Bolt suggested that the accountants could advise us on this matter, and that the issue also has to go to General Membership for approval.

Executive Director's Report: Executive Director Stepp reported that he has begun working on harmonizing the By-laws and the Charter, with input from Director Iwan. He asked for input from the Board on such issues as changing the fiscal year. He expected to have a draft out for review by the other committee members, Director Iwan and SMPB Chairman Shakal, within the next month or so. A formal proposal should be ready by the time of the next General Membership Meeting. Director Iwan has basic concerns that he would like to see addressed prior to revising the By-laws. He is concerned that COSMOS is not currently operating according to the By-laws of the Corporation, and that COSMOS is vulnerable from an accounting point of view. These issues arise from COSMOS starting with a Charter, but evolving into a Corporation with By-laws. President Bolt expressed that he believes that as President he is operating legally, and that it is his duty to see that COSMOS does so. What concerns President Bolt and others is that COSMOS may lose the agreements represented in the Charter, which may not be easily replaced. Director Iwan noted that the By-laws do not identify categories of membership as the Charter does. He is also concerned that if the Board members are controlled by other organizations, then COSMOS may have to credit financial matters back to the other organizations. President Bolt appreciated the concerns being expressed, and remanded the matter to the By-laws Committee under the direction of Executive Director Stepp.

Executive Director Stepp reported on the Geotechnical Data Archiving and Web Dissemination Workshop held on 5-6 October 2001. The workshop, developed from input from the PEER Lifelines Program and others, had about 50 attendees, representing Caltrans, USGS, USDOT, CDMG, and private companies. The proceedings are nearly complete. One of the major findings of the workshop is that the technologies exist to develop the data archiving and dissemination process and products, and they are ready to be implemented in a virtual system. A pilot database system targeted at Caltrans and CDMG is being planned as the next step. The PEER Lifelines Program is currently considering a proposal for this pilot, and has suggested including PG&E and the USGS in the pilot. The funding for the pilot is about \$90,000, and will include four work groups. The project may begin in March.

Executive Director Stepp also reported on the COSMOS Building Instrumentation Workshop that was held in mid-November at PEER. About 50 enthusiastic participants attended it. A draft summary is in the review process, and the proceedings should be published in March. Follow-on activities will be discussed in the SAC meeting tonight.

The ANSS Strong-Motion Installation Guideline has been sent to the USGS. There is about \$7000

remaining from the \$30,000 grant, which Executive Director Stepp has requested be transferred to other uses by COSMOS. A letter from the USGS acknowledging receipt of the document has been received.

Executive Director Stepp suggested that COSMOS purchase a video projector. This would avoid paying rental fees of \$400 per day. For a purchase price of \$4,500, a long-term cost can be avoided. Office Secretary Johnson reported that the unit being considered has better connectivity than less expensive ones, and can be purchased through the University. She also noted that in a typical year the projector would be used six days, indicating a breakeven in about two years. Director Naeim moved to authorize purchasing a suitable video projector. Director Ake seconded the motion, and it passed unanimously.

Executive Director Stepp expressed special thanks to the Bureau of Reclamation and Director Ake in particular for providing a laptop to COSMOS, which was used at the EERI meeting.

SAFER Update: Roger Borchardt reported that a request has been received from the National Survey for Seismic Protection in Armenia for forty strong-motion instruments (SMA-1's). A written proposal was circulated in the Board meeting. They have offered to provide shipping. There is strong support for the proposal in WSSI. SMIP and the USGS are each able to provide twenty instruments. Borchardt views this a shakedown to find out exactly how to do this transfer. Kinematics would be willing to provide shipping boxes. There would be minor office costs to COSMOS, less than \$200. SMPB Chairman Shakal asked for, and Secretary Savage also wanted, verification that this program is not perceived negatively in terms of "dumping" outdated instruments. Borchardt and others reported on many favorable views of the program. Director Anderson asked if there were COSMOS costs associated with export or import duties, and the answer was no. The procedures for transferring responsibility for the instruments to COSMOS have been determined for the USGS and CDMG. Director Iwan wanted to be sure that the transfer of the instruments to COSMOS was fully compliant with the necessary conditions for loss of control by CDMG and the USGS. President Bolt moved to accept the request, and Secretary Savage seconded the motion. The motion passed unanimously.

Report on the Advanced National Seismic System: Secretary Savage provided a brief summary, in the absence of John Filson. By the end of FY2001, a total of 250 strong-motion instruments have been installed. The National Steering Committee and National Implementation Committees met for the first times in FY2001. The funding for FY2001 was \$3.6M. In FY2002, the planned budget is \$3.9M, and the National Steering Committee met in November 2002 to review the year's plans. The seven ANSS Regions had proposed installing 110 strong-motion instruments. The National Implementation Committee is applying the plans developed by the Technical Integration Committee.

President Bolt noted the considerable progress in ANSS that has been made with the limited funding that is available. Director Anderson expressed the delight in his region that new strong-motion instruments are going into the Reno-Carson and Las Vegas areas. There has been a considerable in-kind contribution from the University of Nevada. President Bolt asked if there were efforts that COSMOS could make to help with implementation at the regional level. Vice President Davis noted that the structural instrumentation aspect of ANSS needs much more attention, as was expressed at the National Steering Committee. Director Anderson noted that guidance on siting and instrumentation is needed as soon as possible, to help the advisory committees think realistically and in the context of the national priorities.

Report from Strong-Motion Programs Board: Chairman Shakal reported on the completion of the COSMOS strong-motion data format, which was finished in 2001 and has begun to be used. In TriNet, the conversion between SEED format and COSMOS format has been completed as of December 2001. SCEC is now offering data in COSMOS format for Volume 0 and Volume 1 data. CDMG and USGS are working on conversions between internal formats and COSMOS.

The next step is to address common processing of raw data. At least there should be defined inputs and outputs, as well as calibration records. Director Anderson commented that having some reference standards for processing is a good idea. Thus anyone with a processing program could compare its results with a standard. He wondered how widely publicized the COSMOS formats are. Secretary Savage suggested preparing an article for SPECTRA. The COSMOS format is available at the web site.

COSMOS Virtual Data Center Status: Ralph Archuleta summarized the status of the COSMOS VDC. There are 12,612 acceleration traces in 207 earthquakes available through the VDC. 41 earthquakes were added during the past year. He showed who is using the data by looking at .com searches (9,600 in the past 13 months) compared with .edu (17,633, probably many students doing class assignments), .gov (1,941), and 40,000 that can't be identified. 72 different countries have been using the web site. Many Taiwan users accessed the ChiChi data after they were made available. Italy is the largest international user, followed by Turkey and Colombia.

Recent enhancements include additional parameters (peak velocity, focal mechanism) and links to corrected and uncorrected data, various formats and processing, and identification of who did the processing. The New Zealand data have been received and will be added. It is necessary to remove the magnitude less than 5 events. They are looking at adding a quality field, including response spectra plots, and providing original, COSMOS, and XML formats. Archuleta also wants to offer processed data, not just unprocessed data. President Bolt suggested preparing articles to go into the EERI Newsletter and the Seismological Research Letters.

A proposal has gone into NSF Civil and Mechanical Engineering Systems to support the VDC, but the panel will not meet until the first week in March. The proposal is for just under \$400,000 for three years. Archuleta has also submitted a proposal to SCEC for 1/2-year support. The current funding will end on July 1, 2002. The potential to get ANSS funding seems limited by the lack of the full proposed ANSS funding. President Bolt reported that John Filson supports the value of the COSMOS VDC, but thinks that the USGS should not pay for all of it. Vice President Davis also noted that John Filson offered to look into USGS funding for the current year, and would tell NSF that their support of the VDC is important. Executive Director Stepp also will speak with NSF. Archuleta noted that NSF should recognize the high educational value of the VDC, as evidenced by the user patterns.

John Anderson noted that David Wald had indicated that strong motion data could be distributed directly through ShakeMap, and that this may be a kind of competition with COSMOS VDC. Discussion of this was deferred to the SAC meeting.

Adjourn: President Bolt noted that there might be a special Board meeting to address By-laws questions. The next regular Board meeting will be held at the time of the General Membership Meeting, and is planned for October 24, 2002. The meeting was adjourned at 3:40 PM.

Closing Comment: Vice-President Davis informed the meeting participants that the California Division of Mines and Geology has changed its name to California Geological Survey as of the first of March 2002.