

COSMOS

Consortium of Organizations for Strong-Motion Observation Systems

SENIOR ADVISORY COUNCIL

6 February 2003
7:00 PM – 9:00PM

Marriott Downtown Hotel
Portland, Oregon

Minutes

Present:

C. Allin Cornell (Chair)
James F. Davis
John G. Anderson (Secretary)
Maury Power
J. Carl Stepp (Executive Director)
Bruce A. Bolt
J. Ake
R. Archuleta
R. Borchardt
M. Celebi
Claire Johnson
W. D. Iwan
F. Naeim
A. F. Shakal
Melinda Squibb
D. Yule

Notes recorded by John Anderson. These notes did not attempt to be complete or to fully attribute every idea. Rather they attempt to capture the main ideas of each discussion. Furthermore, I have added in some of my own thoughts (in italics) that came later as the summary was being prepared.

Question #1 was introduced by J. F. Davis: What actions should COSMOS take to promote membership?

Davis commented that a large membership is needed to achieve COSMOS mission. He invited discussion also on the value of the COSMOS strategy to have a mix of general memberships and organizations.

The following list has specific organizations and categories of individuals who might be approached for memberships (mostly identified by Bruce Bolt):

- People who use the data
- Consultants should approach the people they consult for

- Engineering firms
- Subscribing members of EERI
- All instrument manufacturers. (Reftek and Geotech manufacture instruments for ANSS but are not members)
- FEMA
- People at the EERI meeting
- EERI Subscribing Members
- URS Greiner
- Bechtel
- Anyone who uses the strong-motion data a lot.
- Membership of SEAOC

The following are ideas of potential enhanced services for members:

- Alert members of new data
- Advanced search engines on the database
- Forward advocacy updates to members
- Emails to members with information on issues, draft advocacy letters, information on who to contact

Other thoughts:

- Archuleta recommended that we offer \$5 memberships to students.
- Iwan recommended honorary memberships to anyone who can help COSMOS
- Investigate possibility of auxiliary membership in COSMOS with memberships in EERI or SSA.
- Confront everyone using the data with the importance of joining COSMOS.
- Since ANSS is an urgent issue, try to get 5 minutes for the general session.
- We have strength from both kinds of memberships. Membership should be mixed. We should not de-emphasize either kind. Individuals give strength in numbers that helps for advocacy. We get financial strength from organizations and a different flavor of advocacy.
- Individuals can grow into corporate memberships.
- COSMOS should be sure to offer a regular, informative newsletter.
- Iwan pointed out that there are two themes of reasons for in this discussion. One is advocacy, of the nature of “Save the whales.” The other is benefits of the nature of “What you will get if you join.” COSMOS may benefit from knowing what path it wants to take.
- *On the other hand, focus on the mission and objectives may cause that problem to get sorted out.*
- Shakal suggested that an emerging problem could arise from the success of the Virtual Data Center. Visibility of the programs that collect data is essential for their success, and citing data as coming from COSMOS rather than CDMG, for instance, can put the source program at risk. *We could ask VDC to tabulate the number of data that they distribute from each source and provide a report at least annually, or on demand from the data source (when they are coming up for reauthorization ...)*
- COSMOS name. Does the name *Consortium of Organizations for Strong-Motion Observation Systems* in some ways limit the membership? Analogy with *Earthquake Engineering Research Institute* – the only word there that describes all the members is *Earthquake*. Similarly with COSMOS, only *Strong-Motion* describes all the members.
- Advertise member benefits: free reports, new data alerts via email, technical assistance with data searches, and so on in the Newsletter.

- Provide additional VDC access features to members; that is, members can sign in to the VDC and obtain technical assistance with data searches, additional data features such as different processing or post processing.
- Put a membership application on the VDC home page; click here if you want to join COSMOS.
- Make presentation of VDC status at EERI, SEAOC, other meetings each year.
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- Make presentation of VDC status at EERI, SEAOC, other meetings each year.
- Advertise benefits of membership in other professional association newsletters.

Question #2 was introduced by M. Power and F. Naeim: Should COSMOS develop activities aimed at expanding the use of strong-motion data in engineering practice, e.g., development of practical training seminars on strong-motion data application?

Power identified uses of time histories in geotechnical engineering:

- analysis for ground failure, dynamic structural analysis, soil structure interaction, dam response
- develop seismic input for a project, developing statistics of motions for a given distance, magnitude, and site condition
- develop predictive attenuation relations
- develop design parameters from statistical relations.
- Most large corporations use time histories
- Seminars with emphasis on applications may be successful. Many applications cannot be done without time history analysis.

Naiem asked some questions:

- Can we promote usefulness of strong-motion records? YES
- Can we promote usefulness of strong-motion records in everyday practice? NO. 90% of applications are 1-5 story products designed at a very competitive price, and there is no time to use time histories.
- All engineers use time histories day in and day out, in the sense that everything they do is based on time history. So the validity of their daily activities depends on seismic data. COSMOS needs to overcome the belief that “God wrote UBC97,” and emphasize the value of strong motion data to the “everyday” engineer.
- Performance-based design depends on time histories.
- Naiem also pointed out that there is a lack of correlation between strong-motion amplitudes and structural damage. There is a desperate need for data from buildings.

Discussion included the following points:

- There is still a serious shortage of viable time histories (especially for large events).

- Some engineers will enroll in an advanced course not because they use time histories in their daily practice but because they hope the training will be a springboard to allow them to use the time histories on future projects.
- The 95% who don't use time histories might be attracted to support COSMOS through seminars, discounts to seminars for members, and the opportunity to hear famous scientists talk.
- NEES is well funded and needs time histories in all aspects of its work. Input needs cover different building types, different site conditions. We should aim to bring NEES into COSMOS.
- Strong-motion data is the basis for the current PEER / SCEC NGA project.
- It might be possible to add a 1/2-day COSMOS seminar to the annual SMIP seminar.
- EERI might be the better market. COSMOS might offer a seminar the day before the annual EERI meeting.

Question 3. ANSS has a short-term advocacy problem. What should COSMOS do? Discussion included the following points:

- The engineering community is not on board as a strong advocate due to the tactic ANSS adopted to handle the small funding. Briefly, the tactic is to emphasize getting ground motion measurements in many urban regions.
- Sustaining what we have will be virtually impossible if the cut is allowed to survive.
- This is a make-or-break moment for national seismic monitoring.

Where is the problem?

- Iwan suggested that there may be a problem with people above the earthquake program in the U.S.G.S. and Department of Interior.
- Davis suggested that there is significant support from the U.S.G.S. Director, and that the problem is with Department of Interior and the OMB.
- Ake suggested that the reduction from \$3.9M to \$2.0M is a litmus test by OMB to see if they can zero the budget. If the constituency does not come forward this year, the program will be gone in the next budget.
- Now the only place to restore the cuts is through efforts to Congress.

Issues to be solved

- We lack a persuasive message.
- Case must be presented in a clear, unavoidable way.
- We must make up for lack of large numbers in the constituency.
- It will be a challenge to rally the constituency in a short time.
- Our best efforts are essential in the next 6 months or less.
- We must target the appropriations committee
- We must get support from the California delegation. Senator Feinstein has shown more interest than Senator Boxer.
- We need a champion in Congress.
- We need endorsement of the National Association of Emergency Managers.
- ANSS must work harder on instrumenting structures.
- ANSS has accomplished remarkably much with the paltry funding it has received up to this time.
- We have 6 months.

- COSMOS must serve as the rallying point for the effort.
- Post information on the COSMOS web site.

The meeting adjourned at 9:30 PM.