

## IV. Management Plan

The management of SCEC2 will build on the successful structure of SCEC1. However, this structure will be substantially modified to meet the transition objectives (§I.B) and to execute as effectively as possible the new science plan (§III). The University of Southern California (USC) will continue as the managing institution, with T. Jordan, the Principal Investigator on this proposal, as the new Center Director. The management plan, outlined here, will be codified in a new set of by-laws, which will be adopted upon the transition from SCEC1 to SCEC2, tentatively planned for January, 2002.

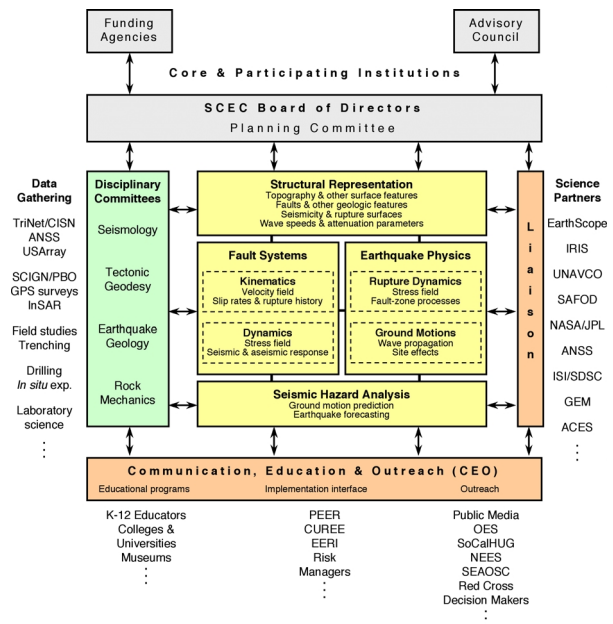
### A. Institutional Membership, Board of Directors, and Executive Committee

SCEC2, like the current Center, will be an institutionally-based organization governed by a Board of Directors. The structure of SCEC2 will recognize both *core institutions*, which are research organizations with a major, sustained commitment to SCEC2 objectives, and a much larger number of *participating institutions*, which are self-nominating through the involvement of individual scientists or groups in SCEC2 activities. The 14 core and 26 participating institutions that were enrolled as of the proposal submission date (December 1, 2000) are listed in Tables 1.1 and 1.2, respectively. This listing may change, however, because SCEC2 will be an *open consortium*, available to any individuals and institutions seeking to collaborate on the science of earthquakes in Southern California.

Each core institution will appoint one member to the Board. In addition, the Board will elect two nominees from the non-core, participating institutions to serve two-year terms on the Board as members-at-large. The Board will be the primary decision-making body of SCEC2; it will meet at least once per year to approve the annual science plan, management plan, and budget, and to deal with major business items, including the election of an Executive Committee and an Advisory Council. Provisions will be made in the by-laws to allow the Board to conduct other business by electronic mail. The Center Director will act as Chair of the Board and the representative of the managing institution (USC). Based on the institutional membership listed in Table 1.1, the Board will comprise 16 voting members. Non-voting members will include the Deputy Director, the Vice-Director for Administration (serving as Executive Secretary), the Vice-Director for Communication, Education, and Outreach, the Chair of the Advi-

sory Council, and the Chair of the Planning Committee.

The Executive Committee will handle the day-to-day decision-making responsibilities through regular meetings and electronic mail. It will have five voting members, the Center Director, who will act as Chair, and four Board members elected for two-year terms by the Board, as well as two non-voting members, the Deputy Director and the Vice-Director for Administration, who will serve as Executive Secretary. The Executive Committee will have the authority to approve proposal submissions and contractual arrangements for the Center.



**Figure 4.1.** The SCEC2 matrix of activities. Disciplinary committees (green box) will coordinate data-gathering activities and infrastructure. Focus groups (yellow boxes) will organize project-oriented interdisciplinary research. Interfaces to SCEC partners (orange boxes) will include scientific liaison, managed by the Deputy Director, and the Communication, Education, and Outreach Program, managed by the CEO Vice-Director. Scientific planning will be the responsibility of the Planning Committee, which will prepare annual budgets for the Board of Directors (gray box).

## B. Administration

The Center Director will be the Chief Executive Officer of the Center and will bear ultimate responsibility for the Center's programs and budget. The Director's responsibilities will include: (a) presiding at Board meetings and, insofar as resources permit, overseeing that orders and votes of the Board are executed, (b) devising a fair and effective process for the development of the science plan, based on proposals or work plans submitted to the Center, and overseeing the plan's implementation, (c) acting as P.I. on all proposals submitted by the Center, retaining final authority to make and implement decisions on Center grants and contracts, (d) ensuring that funds are properly allocated to various Center activities, (e) appointing committees to assist in carrying out Center business, and (f) overseeing the preparation of technical reports from the Center.

The Deputy Director will serve as (non-voting) Vice-Chair of the Board of Directors. He/she will call and conduct Board meetings in the absence of the Chair, and will perform duties and exercise powers as assigned by the Center Director and Board. Among the duties of the Deputy Director will be (a) chair of the Planning Committee, (b) liaison with the SCEC2 science partners and (c) oversight of the CEO Program. T. Henyey of USC, the current SCEC1 Director, will act as the Deputy Director for SCEC2.

The Vice-Director for Administration will assist the Center Director in the daily operations of the Center and be responsible for managing the budget as approved by the Board, filing reports as required by the Board and funding agencies, and keeping the Board, funding agencies, and Center participants current on all Center activities through electronic mail, web postings, and written communications. J. McRaney of USC, the current SCEC1 Director for Administration, will act as the SCEC2 Vice-Director for Administration.

## C. Advisory Council

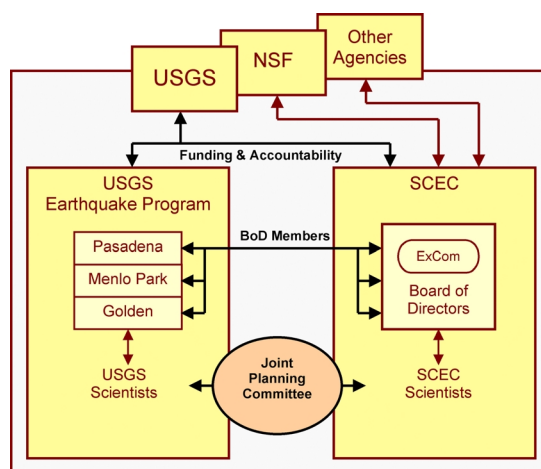
The Center will establish an external Advisory Council to serve as an experienced advisory body to the Board of Directors. The Advisory Council will comprise a diverse membership representing all aspects of Center activities, including basic and applied earthquake research and related technical disciplines (e.g., earthquake engineering and risk management), formal and informal education, and public outreach. The Council will report to the Board through its Chair, who will serve as a non-voting member of the Board. Members of the Council will be drawn from academia, government, and the private sector; they will be elected by the Board for three-year terms and may be re-elected. The Council will meet once per year to

review Center programs and plans and prepare a report for the Center Director. Council members will be kept informed of Center activities and will be invited to participate in all appropriate Center functions and activities. Summaries of Council reports will be made available to NSF, the USGS, and other funding agencies.

## D. Management of Center Activities—a Matrix Approach

SCEC2 will function as a matrix of activities with relationships approximated by the diagram in Fig. 4.1. Standing disciplinary committees in Seismology, Geodesy, Geology, and Rock Mechanics (§III.B.1) will coordinate the principal data-gathering activities (e.g., seismic and geodetic networks, geologic field studies, laboratory work) and the disciplinary infrastructure, which will include the SCEC2 data centers and centralized data processing (e.g., SCEDC, SMDB, SOPAC), as well as communal field equipment and experiments. The chairs of the disciplinary committees will be responsible for annual reports and will submit budget recommendations to the Planning Committee.

Interdisciplinary research will be organized in terms of the focus areas described in §III.B.2—Structural Representation, Fault Systems, Earthquake Physics, and Seismic Hazard



**Figure 3.2.** Diagram showing (in black) the three mechanisms for coordinating SCEC2 and USGS activities: USGS funding and SCEC2 accountability, USGS memberships on the SCEC2 Board of Directors, and the Joint Planning Committee. The JPC will coordinate research programs at the working level by developing a joint science plan.

Analysis. These four focus groups will be *project-oriented*, with well-defined tasks, timelines, and products. They will be responsible for the development, verification, release, maintenance, and improvement of the SCEC2 Community Models. The overall framework for this data-integration and modeling effort, including the software standards for data structures and model interfaces, will be the responsibility of the SCEC2 Information Technology Architect. The IT Architect will report to the Center Director and will coordinate the SCEC2/IT Partnership (§III.B.3) and other technical liaison activities.

Knowledge transfer, education, and public outreach will be managed by a Vice-Director for CEO, who will supervise a staff of CEO specialists. The Vice-Director will act as liaison with SCEC2 partners in earthquake engineering and risk management and will facilitate the activities of the Risk Assessment & Mitigation focus group. Two-way knowledge transfer between SCEC2 and its partners will be actively managed through the Implementation Interface (§III.B.4), which will be facilitated by a contract with P. Somerville at URS, a SCEC2 participating institution involved in earthquake research and engineering implementation.

Annual and long-term budget planning will be the responsibility of the SCEC2 Planning Committee. The Planning Committee will be chaired by the Deputy Director and comprise representatives from each of the disciplinary committees and focus groups; the CEO Vice-Director and the IT Architect will serve as non-voting members. The annual budget cycle will begin with the articulation of the research plan, coordinated through a Joint Planning Committee with the USGS (see below)

and approved by the Executive Committee. This research plan will form the basis for the solicitation and evaluation of “miniproposals” from SCEC2 participants. From these proposals, the Planning Committee will prepare a preliminary science budget for the Executive Committee. The Executive Committee will combine this recommendation with requests from the CEO Vice-Director and the IT Architect and submit a coordinated Center budget to the Board of Directors. The annual budget approved by the Board and signed by the Center Director will then be submitted to the sponsoring agencies for final approval and funding.

## **E. SCEC2/USGS Joint Planning Committee**

A major objective of the SCEC Transition is to align the Center’s activities more closely with those of the USGS. A strong collaboration in basic and applied research, knowledge transfer, education, and outreach will be maintained by the three separate mechanisms diagrammed in Fig. 4.2: (a) the accountability required by USGS funding of SCEC2 activities, (b) memberships on the Board of Directors by the three USGS offices now enrolled as SCEC2 core institutions, and (c) by a SCEC2/USGS Joint Planning Committee (JPC). The JPC will be a combination of the SCEC2 Planning Committee described above and a parallel structure to be set up by the USGS. The purpose of the JPC will be to coordinate research programs at the working level through the development of an annual joint science plan. The joint science plan will be the basis for the SCEC2 budget process, as described above, and will be fed into the internal USGS budget process through channels determined by USGS management.