

**Subject: Transition to New Structure for SW Engineering Task Forces**

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To: Gerry Engel, Rich Leblanc and Don Gotterbarn, chairs of  
Education Task Force and Ethics Task Force

Copy: SWECC

>**From: Dennis Frailey and Leonard Trip**

Co-Chairs, ACM/IEEE-CS Joint Committee to Establish  
Software Engineering as a Profession

Subject: Transition to New Structure

This is along message. Items that require action on your part are preceded  
by the symbol "»".

We are happy to report that the ACM and the IEEE-Computer Society have  
approved, at their respective Fall board meetings, a replacement structure for the  
Joint committee and its task forces. Effective January 1, 1999, the Joint Committee  
and its task forces are dissolved and, in their place, there will be a new entity called  
the Software Engineering Coordinating Committee (SWECC), and a corresponding  
set of projects. » 1) **Please pass this information on to your respective task  
force members.** You may just want to forward this message. » 2) **Please provide  
us a list of your task force members so we can request that their respective  
societies acknowledge their work in an appropriate fashion.**

SWECC consists of a chair (Leonard, representing the CS BOG), vice chair (Dennis,  
representing the ACM Council and EC), and two other representatives from each  
society. The ACM representatives are Mark Ardis (representing SIGSOFT and the  
technical community) and Linda Northrop (representing the Education board and the  
education community). CS representatives are Karl Reed (representing TCSE and  
the technical community) and Doris Carver (representing the Education Activities  
board and the education community). Both the ACM Council and the Computer  
Society Board of Governors have expressed a strong interest in knowing about the  
activities of SWECC and its projects.

WECC is jointly owned by the two societies and it will function in several roles. Among them are:

coordination of related activities. We are establishing liaisons with many activities related to the body of knowledge, accreditation, curriculum, licensing, certification and such.

communication about activities related to the software engineering profession. Among other things, we are creating a web page that will describe the activities of SWEET and its projects and will have pointers to other activities related to establishing software engineering as a profession. A forum for public discussion is one possible feature. You are welcome to suggest items to be included or pointed to by this web page.

projects. Instead of task forces, SWEET will operate through a series of projects, for which it will provide sponsorship and oversight. Each project will have a concrete goal and a defined duration. The bylaws of SWEET, as approved by the two societies, call for each project to be proposed to and approved by SWEET, with follow-on approval by each society. Each project is to have its own financial sponsorship and governing structure, reporting to SWEET. Each project's management structure will include an appointee from each society, who will report to his or her society on a regular basis.

The body of knowledge project, which has been sponsored for the past year by the Computer Society, will be presented to the ACM for approval in about two months. The projects from the education and ethics areas are expected to follow, later in the year.

Transition. By design, the project structure offers a relatively straightforward transition from the current task force structure. The main differences are a different funding structure and a revised governance structure that should provide more overall coordination among related activities and more communication to the professionals and, indeed, to the interested public. For example, the Texas Board of Professional Engineers and the new chair of SCAB have both requested to be kept involved in and aware of these activities, and both are planning to make use of the

results of our work.

Our intent as chair and vice-chair of SWECC is to transform the current task force activities into projects under SWECC. We intend to retain the key individuals from each task force and to provide a mechanism by which their activities can achieve more impact. To that end, » 3) *we are requesting that you, as leaders of the* current task forces, prepare project proposals to be reviewed by SWECC. Further details for each of your areas can be discussed separately, although some general guidelines are listed below.

SWECC plans to meet twice a year in person (winter and summer) and regularly between such meetings by email and/or web forums. Thus, proposals that you prepare can be discussed informally with us in an electronic fashion and can even be approved and forwarded to the sponsoring societies in that fashion. The first meeting of SWECC will occur on January 28 and 29, 1999 in Austin, Texas. The primary purpose of this meeting will be to organize SWECC, so we do not expect to hear full reports or full proposals from your task forces. However we would like to hear an abbreviated report from each task force (it need not be in person, since agenda time will be slim). > > 4) *Please prepare a brief report summarizing past activities* and future project plans, including strategies to be used for achieving your objectives. Note that several members of SWECC have not participated in previous activities and will benefit from having a brief historical overview. Please submit this report electronically. If you have a representative who resides in the area (for example, Laurie Werth of the education activity resides in Austin), we could meet with them briefly on the afternoon of the 28th to discuss your report, but the small amount of time we expect to have would not justify long distance travel just for this purpose.

Code of Ethics and Professional Practice: Both societies have approved the code of ethics, so our understanding is that the primary objective of a project at this point will be to maintain this code and to evolve it as more professional practice elements can be established.

Education: The education boards of both societies have endorsed your proposed accreditation criteria and we understand that CSAB/ABET will make use of these as it develops detailed procedures for accreditation of software engineering

programs. We would like a proposal for an education project that addresses curriculum matters, and we encourage you to consider some kind of joint activity with the Working Group for Software Engineering Education, chaired by Nancy Mead of SEI and Tom Hilburn of ERAU, whose work seems to dovetail well with your own. For example, David Parnas has recently suggested a workshop on software engineering curriculum issues that would be jointly organized by your activity, the working group, and possibly others working in that area. This is the kind of activity that SWECC would support. (Dennis Frailey discussed this and other ideas with Don Bagert of the Working Group, Laurie Werth of the Education Task Force, and David Parnas when Parnas recently visited the University of Texas and the Texas Board of Professional Engineers.)

Proposals: Proposals, need to address the following issues in order to satisfy the requirements of the two societies: - summary of the project's goals and objectives - the expected duration of the project - the expected outcome / deliverables of the project - the planned process for achieving the desired results - expected intermediate milestones and proposed reporting dates (to SWECC and the societies) - the proposed management and governance structure, including names of key individuals involved - a budget that shows the total cost for the project, and how the money will be spent each year. - an indication of where the money will come from and in what fiscal years it will be needed.

Funding: - SWECC will not have significant funds for direct project support. However because of its oversight and sponsorship role, each project will provide a financial report to SWECC on an annual basis. The SWECC fiscal year runs from July 1 through June 30, thus financial reports will be due at its summer meeting. - for relatively small projects (roughly, under \$10K/year), it is likely that each society or its sub-units would provide the funding, although this is not a requirement. For example, an education project might solicit funds from the respective education boards or corresponding special interest groups or technical committees - for larger projects, sponsorship should be solicited from such sources as:

- society SIGs or TCs - government funding agencies such as NSF or NIST - business and industry sources To illustrate, the BOK project will have roughly 10% of its budget covered by each of the societies and the remainder from industry and government sources

#### Management and Governance

- SWECC will normally expect to review annual progress reports from each project at its Winter meeting and to see intermediate progress electronically at appropriate milestones. Another option for a major project is a special review event.
- The management of each project will vary, depending on the size. At a minimum, there should be at least two individuals, one from each society, who manage the project and whose duties include reporting to their respective society about project status and progress. One of these individuals should also report regularly to SWECC, as previously described.
- larger projects that solicit funds from industry and other sources are likely to include one or more advisory boards. For example, the BOK project has an industrial advisory board. Such boards provide representation, expertise, and may possibly also provide individuals to participate in projects.
- projects may elect to have panels of experts to provide expert review and evaluation of their activities. A panel of experts, for example, was used very successfully to review the code of ethics, and the BOK project is forming such a panel. This mechanism assures that the results have high credibility.

Please feel free to call one of us for further discussion of your project(s).

Regards,

Leonard Tripp

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