A plan to define a Code of Software Engineering Ethics and Professional Practices

Steering Committee for the Establishment of Software **Engineering** as a Profession

Software Engineering Ethics and Professional Practices (SEEPP) Task Force,

Software Engineering Institute, **Saturday** Jan. 29,1994

Attendees: Mario **Barbacci,** Don **Gotterbarn,** Robert Melford

The purpose of the meeting was to **identify** the activities of the task force charged with the implementation of recommendation #3 of the Steering Committee for the Establishment of Software Engineering as a Profession.

I   Organization of the Task Farce

The task force will be lead by appointed **co-chairs** representing the IEEE Computer Society (CS) and the Association for Computing Machinery (ACM). **The task** force **will** be a small body, relying on focus groups and surveys to conduct its work. In addition, it **will work** in **coordination** with the task forces implementing the other recommendations of the Steering **Committee.**

The task force will use a standards development model as process for its activities.

The product of the **task** force will be a report to the Board of Governors and a draft "Standard of Software Engineering Professional Practices".

This presumes the need for such a std; but the Steer. Committee wasn't sure such a std was necessary

II   Scope of the Task Force

The original recommendation to the Board of Governores **of the Computer** Society focussed too **narrowly** on the term "Code of Ethics". This task force will focus on both "Ethics"-and "Standards of Practice". The latter provide a) Guidance to resolve conflicts (in Software Engineering the players include users, developers, employers, regulators, others), b) Standards of quality, and c) Responsibility for understanding the implications of one's work.

In addition, the task force will address cultural and national differences that bear on the definition of Software Engineering Ethics and Professional Practices.

III   Components of the Task Force.

The task force will include participants with links to other relevant entities and professions, **e.g:**
- Technologists (most members of the task force also fit this category)
- Educator (Joyce **Currie** Little): -> Don to contact [She has accepted as of **2/6/94**]
- Corporate ethics officer: -> Don to contact TI person
- Legal (malpractice, negligence, liability, intellectual property): -> Don to contact
- Ethicists (Pat Sullivan, Mike **McFarland):** -> Bob to contact
- Standards process expert (Leonard **Tripp,** Fletcher **Buckley):** -> Bob to contact
- CS ethics subcommittee **chair** (CS-COOP Sue Weisband): -> Bob to contact
- ACM Ethicist (Keith Miller): -> Don to contact **[He** has accepted as of **2/6/94**]

IV   Schedule of Activities

There are several identified milestones to develop progressively more refined drafts of a report to

— Who is funding the people on this task force (and the one on body of knowledge, too)

be delivered to the **Board** of Governors

1　Activities Prior to Meeting **#1**
- Grant funding sources
- Establish **email, conferencing,** repository
- Initiate library search & examples (codes, ethics, licenses, certifications, PARS for related activities).

2　Activities During Meeting **#1**

Meeting to take place on Saturday April **30** following the **CEI** Conference on 28-29 April. The meeting **will** take place at the Computer Society Headquarters, in Washington D.C. Bob will contact **CS** to make arrangements.

　　Revise **Task** Force schedule
　　Partition/categorization of standards
- Funding grant
- Establish deadlines for WG draft standards
　　Complete email/conferencing/public bulletin board
- Formulate draft PAR (for internal use **only)** to **identify** components for successful submission
　　Prepare call for participation (**CFP**) in **working** groups
- Identify audience and time limit for **CFP (e.g. 30** days)
- Identify WG chairs (continues)

3　Activities After Meeting **#1**
　　Collect **CFP** responses
- Complete WG chair assignments
　　Continue library **search/examples**

4　Activities During Meeting **#2**

Meeting to take place on Saturday June 11, 1994, prior to the NEC Conference in Boston on June 13-15. Bob will contact Mike **McFarland** to host at Boston College.:
- Evaluate and select responses
- Form **STD WG(S)**
- Formulate and submit **PAR(S)**
- Establish schedules for WG drafts (series of draft versions: confidential, discretionary, public)
- WG begin work on confidential draft for meeting **#3**

5　Activities During Meeting **#3**

Meeting to take place around April 15, 1995, place TBD:
- Revise draft (confidential draft becomes discretionary draft)
- Send for comments to selected reviewers (including selected BOG)

6　Activities During Meeting #4

Meeting to take place around **August/September** 1995, place TBD:
- Revise input from reviewers and write public draft
　　Draft report
- Submit **(Nov.** 95) report and draft to BOG

Office of the Vice Presisdent

February 22,1994

To: Council

From: Stu Zweben

Subj: Update on "Software Engineering as a Profession"

At its August 1993 meeting, Council endorsed ACM's participation in a project related to evaluating/establishing software engineering as a profession. This project was to address questions such as the current state of the practice of software engineering and the body of knowledge required of those who practice software engineering; issues relative to the licensing, certification and registration of software engineers; and issues relative to educational curricula and accreditation in software engineering.

Council preferred that, if possible, ACM work with IEEE-CS on this project, recognizing that IEEE-CS then was in the process of establishing a steering committee of its own to address this subject. Council also delegated to the Executive Committee the responsibility of managing this activity for ACM, including making any relevant appointments and providing necessary funding.

I was appointed to the IEEE-CS steering committee shortly after the ACM meetings in August. Other members of the committee are Mario Barbacci of SEI (the Chair), Fletcher Buckley of General Electric, L a . Druffel of SEI, Norm Schneidewind of Naval Postgraduate School, Win Royce of TRW, and Elliot Chikofsky of Northeastern University. The IEEE-CS President (formerly Jim Aylor, currently Laurel Kaleda) serves ex-officio on the committee.

The steering committee reported to the IEEE-CS Governing Board in November 1993. A copy of that report is attached. (Note that Chikofsky wasn't on the committee then; he was added recently.)

For several months, I worked to get the steering committee to address first the questions of body of knowledge and current state of the practice; the November report indicates that the committee was in fact in agreement with this direction. I also worked to make ACM an equal partner in this project. Finally, I briefed other software engineering colleagues on this project, notably at a birds-of-a-feather session held at the January 1994 SEI Conference on Software Engineering Education. I also briefed the ACM EC on this project at various times, and discussed the project with the ACM Board Chairs and EC at our CPC meeting in December 1993.

Meanwhile, in December 1993, Mario Barbacci convened a meeting of some indusmal representatives to the SEI to launch a "task force on the body of knowledge required of software engineers," which is being chaired by Patricia Douglas of IBM Skill Dynamics. A survey is being prepared, the purpose of which is to get significant input from several companies about the definition of this body of knowledge.

Another task force was launched in January 1994, co-chaired by Bob Melford of Melford and Associates and Don Gotterbarn of E. Tennessee State Univ. This task force is to develop a "draft standard of software engineering professional practices."

Some planning has been done to organize a third task force that would deal with educational issues related to the software engineering project. The Education Board Chairs of the two societies have been invited to meet with the steering committee chair to discuss this aspect of the project.

In February 1994, Laurel Kaleda wrote to Gwen Bell indicating that the Computer Society was agreeable to making this a joint project of the two societies. The (new) steering committee will comprise Mario as Chair, an ACM-appointee as Vice Chair, and six other members, three appointed by each society.

It is my hope that this project will move forward with good collaboration between the two societies, that the two societies will make their appointments quickly, and that the new steering committee will meet soon to review what has been done to date, and either reaffirm those directions or modify them.

Attachment