As more people join in, we need to remind ourselves of the goals of this task force so we are all in synch.

This task force is working on a plan to identify the body of knowledge of software engineers. It is part of a larger joint activity of the IEEE Computer Society and the ACM aiming at the establishment of SE as a profession.

The plan is to define the body of knowledge piece by piece, through surveys. The surveys will define a list of components of knowledge, (primary), and levels of knowledge (secondary) at various stages in the software engineer's career.

Survey #1 is to identify components i.e. things all Software Engineers "should know" and "when they should know them" (at entry level? after some years of experience?)

A preliminary survey can ask people to review/prioritize and add additional components. This preliminary survey is just for debugging the real survey and will be limited to a small group (30  $\sim$  40 expert participants) to allow confirming survey results with participants.

We are in the middle of defining the initial list of components. The audience for the test survey is the task force.

The target audience for the first survey is the task force itself augmented with members of representative organizations.

Survey #2 is to identify the level of knowledge required for the components identified and classified by survey #1.

Again, as with Survey #1, before the large ballot, we will do a test involving a few hundreds of participants that agree to work with us. After revision, if necessary, conduct mass balloting with thousands of participants.

Primarily we are concentrating on industry, but any other organizations can provide input.

Expected result from survey 1

Result from Survey 1 is a table with a list of component above a cut. These are topics that all software engineers should know when they first start working or after a few years of experience. Topics are clustered under major categories (type of knowledge)

Expected result from survey 2

Result from Survey 2 is an augmented table with the components identified in the first survey but now asking for the level of knowledge required at entry or after a few years of experience. The levels of knowledge are Knowledge (K), Comprehension (C), Application (Ap), Analysis (An), Synthesis (S), and Evaluation (E)

## **Industry Task Force Milestone Chart**

Task Descriptions	Jan 94	Feb 94	Mar 94	Apr 94	May 94	Jun 94	Jul 94	Aug 94	Sep 94	Oct 94	Nov 94	Dec 94	Jan 9
Preliminary activities (1) Identify survey designers - 1/15/94 (2) Complete candidate list of components and categories - 2/15/94	$\Rightarrow$	$\Rightarrow$	- 11				- 11				- 11		T
Survey #1  (1) Identify group to test survey #1 (30 to 40 participants) - 2/15/94  (2) Draft survey #1 (components of knowledge) and mail - 3/15/94  (3) Collect test survey #1 5/1/04		$\in \square$			$\stackrel{\widehat{\omega}}{\Longrightarrow}$	£		© 🖒	©				
Survey #2  (1) Survey designers start work on survey #2 (format, audience, etc.) - 3/15/94  (2) Draft survey #2 (levels of knowledge) and mail - 9/15/94  3) Collect survey #2 (hundredths of participants) - 11/1/94  4) Complete analysis of survey #2, revise, and ballot (thousandsof participants) - 1/1/95											$^{\odot}$		<b>⊕</b> □