
Plan

*Stone Man Version of the Guide to the
Software Engineering Body of Knowledge*

*Approved by the Industrial Advisory Board
Guide to the Software Engineering Body of Knowledge Project*

Prepared by

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Project Objectives

The Industrial Advisory Board agreed in Mont-Tremblant that the objectives of the Guide to the Software Engineering Body of Knowledge project are to:

- characterize the contents of the Software Engineering Body of Knowledge;
- provide a topical access to the Software Engineering Body of Knowledge;
- promote a consistent view of software engineering worldwide;
- clarify the place of, and set the boundary of, software engineering with respect to other disciplines such as computer science, project management, computer engineering and mathematics;
- provide a foundation for curriculum development and individual certification and licensing material.

Project Deliverables

The Industrial Advisory Board agreed in Mont-Tremblant that the main deliverables of the Stone Man phase of this project will be:

- a list of Knowledge Areas of software engineering (Knowledge Areas are the major components of a discipline, or subfields of study).
- a list of topics and relevant reference materials for each Knowledge Area;
- a list of disciplines related to Software Engineering¹, and the Knowledge Areas and topics at the junction of Software Engineering and one or more of these Related Disciplines;

Supporting and intermediate deliverables:

- Knowledge Area description specification
- Knowledge Area “jumpstart” documents
- Comment disposition reports
- Complete documentation of all review cycles
- Complete documentation of all intermediate versions of main deliverables

Intended Audience

The Industrial Advisory Board agreed in Mont-Tremblant that the intended audience for the Guide to the Software Engineering Body of Knowledge includes:

¹ It was also agreed in Mont-Tremblant that knowledge expected from a graduate with four years' experience from other, Related Disciplines would only be referenced in the Guide to the SWEBOK. However, these references will be more oriented towards definitions and basic concepts rather than content material *per se*.

- public and private organizations wishing to use and promote a consistent view of software engineering internally, notably when defining education and training, job classification and performance evaluation policies;
- practicing software engineers;
- makers of public policy engaged in defining software engineering licensing rules and guidelines for professionals;
- professional societies engaged in defining software engineering university program accreditation guidelines, and certification rules and guidelines for professionals;
- software engineering students learning the discipline;
- educators and trainers engaged in defining curricula and course content.

Project Underlying Principles

The Industrial Advisory Board agreed in Mont-Tremblant that the two following principles underlie the development approach for this project:

- transparency: the development process is itself published and fully documented;
- consensus-building: the development process is designed to build, over time, consensus in industry, professional societies and standards-setting bodies, among practicing software developers and in academia.

Project Contributors

- Editorial Team (ET) = Project Champion + Executive Editors + Editors
- Leonard Tripp is the Project Champion and his responsibilities are to:
 - Recruit project personnel
 - Provide executive level direction to the project
 - Solicit funding for the project
 - Monitor expenditures of funds against the approved budget
 - Define and organize the review process of project results
 - Coordinate with external agencies
- Alain Abran and James W. Moore are the Executive Editors and are responsible for maintaining good relations with the IEEE CS, the ACM, the Industrial Advisory Board and the Panel of Experts as well as for the overall strategy, approach, organization and funding of the project.
- Pierre Bourque and Robert Dupuis are the Editors and are responsible for the coordination, operation and logistics of this

project. More specifically, the editors are responsible for developing the project plan, the Knowledge Area description specification and for coordinating Knowledge Area Specialists and their contribution, the recruiting of the reviewers and the review captains as well as coordinating the various review cycles.

- Industry Advisory Board (IAB) responsibilities (as approved in Mont-Tremblant)
 - Review and approve the scope and development strategy of the Guide to the Software Engineering Body of Knowledge;
 - Review and approve the selection criteria for Knowledge Areas;
 - Review and approve the list of proposed Knowledge Areas;
 - Review and approve the selection criteria for Related Disciplines;
 - Review and approve the proposed list of Related Disciplines;
 - Review and approve the selection criteria and the list of topics for each Knowledge Area;
 - Review and approve the reference material selection criteria;
 - Review and approve the list of subcommittee chairs; As agreed in Mont-Tremblant, subcommittee chairs are now replaced by Knowledge Area Specialists.
 - Review and approve a broad comment-gathering and consensus-building process for the Stone Man version;
 - Oversee the broad comment-gathering and consensus-building process for the Stone Man version;
 - Assist in promoting the Guide to the Software Engineering Body of Knowledge.
- Panel of Experts(PoE)
 - This group is an input group to the Industrial Advisory Board composed of internationally recognized experts from various constituencies (academia, industry, standards community, curriculum development, etc.). This will ensure that the documents produced have been reviewed from various viewpoints. Its responsibilities are to:
 - Provide guidance on the general direction of the project and its results
 - Provide advice on key project decisions and issues
 - Lend credibility to the project.

- Knowledge Area Specialists are responsible for identifying the topics within the assigned Knowledge Area, identifying reference material for each topic and the rationale for topics and reference selection.
- Reviewers are individuals with a variety of viewpoints (practitioner, industry, researcher, educator, trainer, standards developer, public at large, regulator, licensing authority, legal, etc.) who will be solicited to participate in an organized review of the project deliverables. Reviewers will be asked to contribute by invitation.
- The Software Engineering Community will be solicited to comment and review the project results from a variety of viewpoints (practitioner, industry, researcher, educator, trainer, standards developer, public at large, regulator, licensing authority, legal, etc.). The software engineering community will be solicited from the membership of professional societies (IEEE-CS, ACM, etc.), through various Internet software engineering mailing lists, newsgroups, etc.

Proposed Schedule Outline

In order to better understand the schedule outline, the following tables presents a summary of the project inputs, the supporting and intermediate deliverables as well the main deliverables

Stone Man Phase Inputs	Intermediate and Supporting Deliverables	Stone Man Phase Main Deliverables
<p>Straw Man Version</p> <p>Contributions of:</p> <ul style="list-style-type: none"> • Editorial Team • Industrial Advisory Board • Panel of Experts • Knowledge Area Specialists • Review Captains • Reviewers • Software Engineering Community 	<ul style="list-style-type: none"> • Knowledge Area description specification • Knowledge Area “jumpstart” documents • Comment disposition reports • Complete documentation of all review cycles • Complete documentation of all intermediate versions of main deliverables 	<ul style="list-style-type: none"> • a list of Knowledge Areas of software engineering; • a list of topics and relevant reference materials for each Knowledge Area; • a list of disciplines related to Software Engineering, and the Knowledge Areas and topics at the junction of Software Engineering and one or more of these Related Disciplines.

The Industrial Advisory Board agreed in Mont-Tremblant that this phase of the project and notably the contribution of the Knowledge Area specialists should be managed to schedule. This decision was taken bearing in mind the current window of opportunity for this project. The proposed schedule was therefore built with this constraint in mind.

- Legend:
 - IAB is Industrial Advisory Board,
 - ET is Editorial Team
 - KA is Knowledge Area

Stone Man Phase Set Up and Organization

Activity	Contributors	Target Finish Date	Required Duration	Deliverable	Approval by
Kick off meeting of IAB	ET, IAB	October 1, 1998		Approval of major project directions and deliverables	IAB
Development of KA “jumpstart” documents	ET, “jumpstart document” authors	January 15		Preliminary list of topics for each KA	ET
Recruitment of Knowledge Area Specialists	ET, IAB	January 20		Approved list of Knowledge Area specialists	IAB
Development of a baseline list of KAs	ET	January 20		Approved baseline list of KAs	IAB
Development of Stone Man phase plan and process	ET	January 29		Approved Stone Man Development Plan and Process	IAB
Establishment of a “Panel of Experts” for the project	ET	January 29		Established Panel of Experts	IAB
Development of a baseline list of Related Disciplines	ET	February 12		Approved Baseline List of Related Disciplines	IAB
Development of a baseline Knowledge Area description specification	ET	February 12		Approved baseline Knowledge Area description specification	IAB

Development of Version 0.5 of KA Descriptions

Activity	Contributors	Target Finish Date	Required Duration	Deliverable	Approval by
Development of version 0.1 of Knowledge Area descriptions	KA Specialists	March 12	4 weeks	KA descriptions (version 0.1)	
Review of version 0.1 Knowledge Area descriptions by a core group of reviewers	Reviewers	March 26	2 weeks	Preliminary comments on version 0.1 of KA descriptions	
Development of KA description (version 0.5)	KA Specialists	April 30	5 weeks	KA description (version 0.5) released for review	

Review of Version 0.5 of KA Descriptions

Activity	Contributors	Target Finish Date	Required Duration	Deliverable	Approval by
<p>Review of Knowledge Area descriptions by electronic review groups. Electronic review groups would be organized by viewpoints and would be composed of 5 to 10 reviewers each. 5 to 10 review groups would be set up for each KA. Examples of viewpoints would be “usefulness for licensing”, “usefulness for curriculum development”, “usefulness for professional training”, “alignment with industry practices”, “alignment with software engineering standards”, etc.. Each electronic review group would be chaired by a Review Captain who will synthesize the review group’s comment</p>	<p>Reviewers Review Captains</p>	<p>July 2</p>	<p>9 weeks</p>	<p>Detailed comments Comment synthesis document for each electronic review group</p>	
<p>IAB Meeting in Montreal. The Joint IEEE-CS/ACM Software Engineering Coordinating Committee, the PoE and KA specialists could also be invited to Montreal. This is to be discussed.</p>	<p>ET, IAB</p>	<p>July 14-15</p>			

Development of version 0,7 of KA descriptions

Activity	Contributors	Target Finish Date	Required Duration	Deliverable	Approval by
Development of KA description (version 0.7)	KA Specialists	September 17	11 weeks	KA description (version 0.7) released for review Comment disposition report	

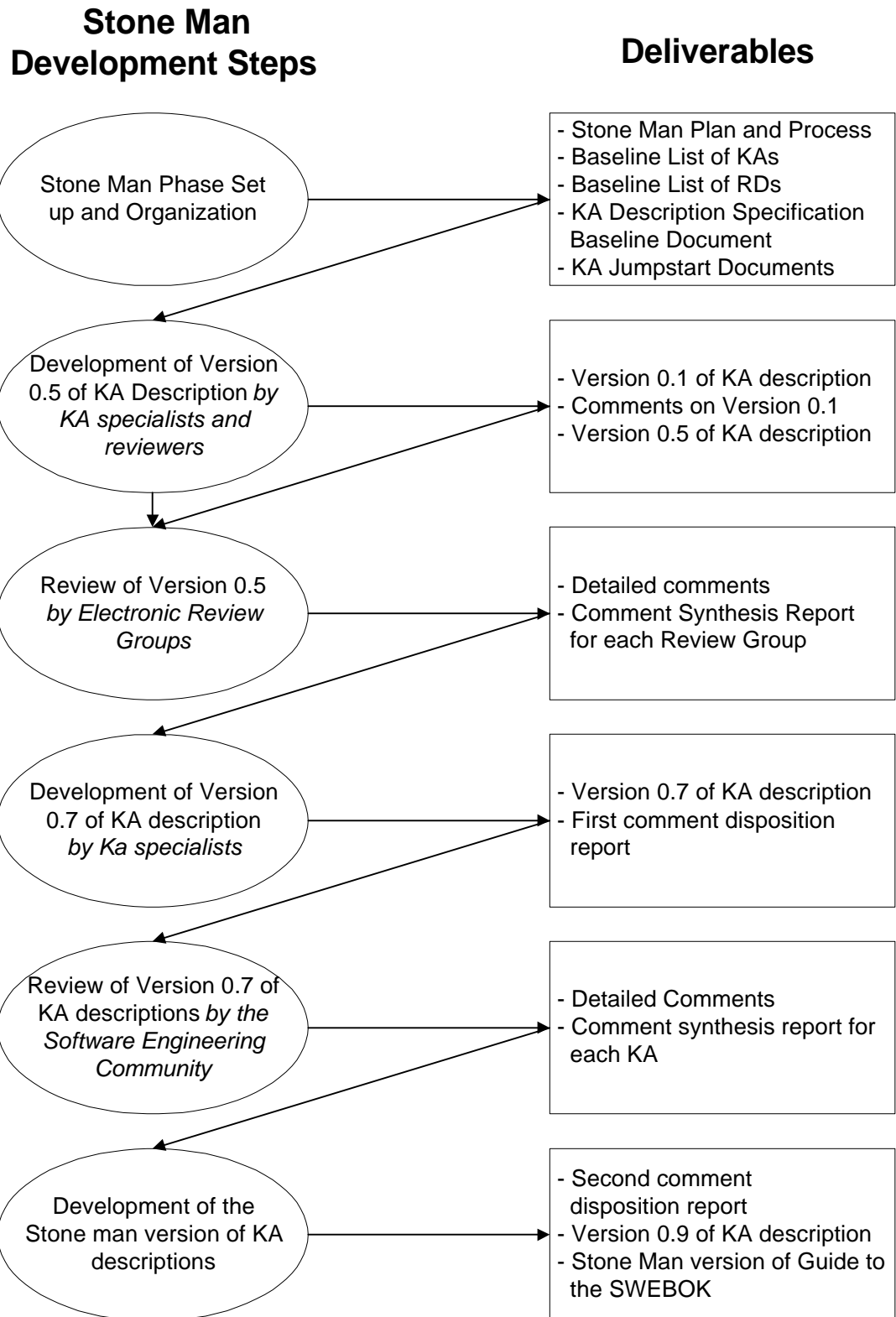
Review of Version 0,7 of the KA descriptions

Activity	Contributors	Target Finish Date	Required Duration	Deliverable	Approval by
Review of Knowledge Area descriptions by the software engineering community	Software engineering community, ET	November 5	7 weeks	Detailed comments Comment synthesis document for each Knowledge Area	

Publication of the Stone Man version of the Guide to the SWEBOK

Activity	Contributors	Target Finish Date	Required Duration	Deliverable	Approval by
Development of KA descriptions (version 0.9) It is to be determined whether comment handling will be done by the KA specialists or by the editors	ET, KA Specialists	December 3	4 weeks	Knowledge Area description (0.9) Second comment disposition report	
Publication on the Web of the Stone Man version of the Guide to the SWEBOK	ET	December 17		Stone Man Version of the Guide to the SWEBOK published	IAB approves that due process has been followed

The process underlying this schedule is illustrated in the following figure.



Preliminary Schedule of Conference Calls

Guidelines for scheduling conference calls:

- To ensure that all major outstanding issues are dealt with promptly and to keep all IAB members well-informed on the status of the project, a conference call of the IAB and ET will be held in the middle of all major activities.
- As a general rule, all documents and conference call agendas will be submitted to the Industrial Advisory Board at least 10 calendar days before the scheduled conference call.
- All conference calls will end with a confirmation of the next conference call.
- Minutes will be written by the ET after each conference call.

Please take note that all calls are scheduled to take place from 1:30 PM to 3:30 PM (Eastern Time).

Preliminary schedule of conference calls:

Tuesday, 19 January 1999

Wednesday, 3 February 1999

Wednesday, 31 March 1999

Wednesday, 26 May 1999

Wednesday, 25 August 1999

Wednesday, 13 October 1999

Wednesday, 17 November 1999

Wednesday, 8 December 1999