

## Presentation of the Semat Results at ICSE 2012 in Zurich

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Semat was invited by International Conference on Software Engineering (ICSE 2012) to present its current results to the software community. The presentation took place in Zurich on Wednesday, June 6 2012. It was led by Mira Kajko-Mattsson and it consisted of two parts: (1) presentation of Semat and its results and (2) panel debate.

The Semat presentation part was initiated by Ivar Jacobson who presented the problem of lacking a sound and widely accepted theoretical basis, presented the Grand Vision of Semat and motivated why the software community needed to refound software engineering. Thereafter, Ivar presented the Semat organizational structure and listed the signatories corresponding to corporate or academic organizations and eminent individual members in the academia and industry.

After Ivar has presented the grand tour of Semat, Mira Kajko-Mattsson gave an introduction to the Semat kernel. She first outlined its overall structure, defined alpha and presented one of the alphas – Software System. Afterwards, Mira illustrated how the kernel may be used in the development projects both within the academia and industry and provided feedback on her experiences gained within two project courses at Royal Institute of Technology in Sweden.

The next presenter, Michael Goedicke, presented the Semat language. He introduced his talk by motivating the need for another language for describing software development processes. Michael then provided a quick demonstration of the language constructs and its use. Finally, he presented the language features such as structure and scalability, extensibility and flexibility and dynamic semantics.

Michael's talk was followed by Brian Elvesæter's talk during which Brian presented the initial evaluation of the Semat kernel and language using Scrum. Regarding the kernel, the evaluation results show that the kernel constitutes a useful map for structuring and defining practices and for selecting and composing methods. Regarding the language, it is not as expressive as SPEM, however, it provides the minimum of constructs that enable to focus on the essentials.

Ivar concluded the presentation part by highlighting the novelty of the Semat results and listed the Semat differentiators. Example of the differentiators are (1) focus are **the practitioners**, not the process engineers, (2) focus is **Method Use and Adaption**, not Method Description, (3) a small kernel is the base for all software engineering endeavors. Afterwards, Ivar demonstrated the value of the kernel to be gained by software professionals, industry and academics. Finally, Ivar invited the audience to support and join Semat.

The panel debate part included two panelists: Barry Boehm and Bertrand Meyer. Both panelists are distinguished software engineering community members and they are Semat signatories. They presented their view on Semat. According to Barry, Semat's principles are needed for most of the future software systems. It is not restrictive. Although it provides checklists, it still gives freedom for innovation. Barry's opinion was that the Semat kernel will grow stronger with broad use by and feedback from the software engineering community. Even Bertrand supported the Semat results. According to Bertrand, defining alphas should be a core task for the software engineering community. He pointed out the diversity of the software engineering work and illustrated its role from the conceptual, constructive, analytical and empirical perspective. Finally, Bertrand raised the issue of formality and expressed a great need for it.

After the panelists had presented their view of the matter, the audience was free to ask questions. There were many questions asked. The prevailing one concerned (1) the differences between the Semat language and SPEM, (2) the theoretical aspects of the kernel and (3) a need for a tool support. Concerning the theoretical basis, the panelists pointed out that there a work was going on covering both the traditional semantic foundation of the language as well as finding a suitable theoretical basis using other disciplines than only theoretical computer science such as for instance, organization and social sciences. The panelists also agreed that in order to reach the practitioners, the kernel, language and practices were not enough. They pointed out that if the Semat results will be accepted by OMG then they will constitute a basis for establishing a specification that can be adopted by tool vendors.