

## Message from the Special Sessions Chair Harry M. Sneed

As chairman of the special sessions in this year's European Conference on Software Maintenance and Reengineering – CSMR 2007, I would like to welcome all of the participants to Amsterdam. We have done our best to put together an interesting program with some of the latest issues in the field of software maintenance and evolution. Altogether 16 contributions have been accepted addressing three important topics. These are

- Model Driven Software Evolution
- Quality Assurance in Software Maintenance
- Maintenance of Service-Oriented Architectures.

The first session on Model Driven Software Evolution is chaired by Dalia Tamzalit from the LINA Institut of the University of Nantes in France. This session combines two highly relevant notions – model driven and evolution. Model driven implies that the source code is no longer in the center of attention but rather a graphical design language from which the code can be generated. Developers should work with the design language to produce a software system. Once the system goes into operation, it transcends from development to evolution. It then follows that corrections, changes and enhancements should be made to the design language instead of to the code, so that in model driven evolution the code base will be wholly or partially regenerated for every new release. For that purpose very powerful code generators and an all encompassing design language covering all possible implementation requirements is necessary. This session discusses the pros and cons of such an approach to evolving complex software systems and whether it is viable or not.

The second Session on system quality and maintenance is chaired by Christos Tjortjis from the University of Manchester in Great Britain. The questions here are what is software quality, how can it be measured and how does it apply to maintenance. Improving the maintainability of software has been a long standing issue in the community. It is the rationale for the many software

reengineering approaches which have been in the focus of this conference since it started in 1997. However, the community has yet come up with a universally acceptable definition of what drives maintenance costs. What is the essential relationship between the costs of maintenance and the quality of the software. Once maintenance quality has been defined, it is then necessary to find which preactive and postactive measures can be applied to ensure a sufficient level. In the end, all efforts to improve software quality, including maintainability, have to be cost justified. These are the key issues addressed by the six contributions to this session.



The third session on a research framework for maintaining service-oriented architectures is chaired by Dennis Smith from the Software Institute in Pittsburgh, U.S.A. The fact is that everyone is propagating service-oriented architectures but that no one is concerned with how they are to be maintained. There is an open issue here, which needs to be dealt with if SOA is going to fulfill its promise. The purpose of this session is to bring together researchers who are familiar with both software maintenance and to have them define a framework in which different approaches can be proposed and tested. Researchers in software maintenance should be encouraged to tackle the many maintenance problems presented by SOA and SOA researchers are called upon to consider the issues of maintenance and evolution of their architectures. This workshop is intended as a take off session for work in this field within the European Community.

I am confident that the attendees will find the workshops interesting and inspiring. I would encourage all to participate in a lively debate on these issues. There is time and opportunity for everyone to contribute.