

# 1<sup>st</sup> Workshop on Continuous Requirements Engineering (CRE'15)

Peter Forbrig

University of Rostock, Germany  
peter.forbrig@uni-rostock.de

## 1 Introduction

We are very glad to be able to organize the 1st Workshop on Continuous Requirements Engineering in conjunction with the 21<sup>st</sup> Working Conference on Requirements Engineering: Foundation for Software Engineering 2015 in Essen. The idea of such a workshop was initiated by Mārīte Kirikova from the Institute of Applied Computer Systems of the Riga Technical University during a coffee brake at the Business Informatics Conference in Lund, 2014. We discussed the need of a workshop that allows to brainstorm and to assemble ideas of agile approaches for small scale enterprises that have to cope with continuously changing environments.

Current engineering-based approaches are rooted into well elaborated systems models, enterprise architectures, ontologies, and information logistics representations. They provide transparency, reliability, and security in the whole lifecycle of the system. Currently such approaches are designed and mainly applied for large enterprises that have relatively long change cycles. In case such changes have to be performed more frequently a much higher flexibility is required. For such systems the engineering processes grow into continuous engineering that requires continuous requirements engineering (CRE). CRE can only be successful if it combines rigid engineering principles with agility, emergence, and spontaneity to support sustainability and viability of the systems under development.

Smaller scale enterprises need new approaches, methods, and tools to be capable to embrace the growing variety of opportunities and challenges offered by fast changing and hardly predictable environment. In this type of systems continuous requirements engineering also can be a solution if it is integrated with management and design approaches applicable for smaller scale enterprises.

In the call for papers for the workshop it was mentioned that the challenge is to support continuous requirements engineering approaches, methods, models, and tools for multi-scale fast changing enterprises and predictable and unpredictable configurations of enterprise networks. It was asked for reports about new ideas and experience reports. Also welcomed were reports about continuous requirements engineering approaches that not yet have been applied to continuous engineering but have the potential for that. A cross-pollination of experiences in modeling and requirements management was assumed.

We are glad that finally five interesting papers made it into the workshop program. The first paper discusses a notation for a subject-oriented business-process notation

and the idea of dynamically changing models that are manipulated by subjects. It is written by Albert Fleischmann, Werner Schmidt, and Christian Stary and has the title “*Requirements Specification as Executable Software Design – A Behavior Perspective*”. The second submission discusses the idea of using work agreements as basis for specifications that control systems during runtime under the title “Using Work Agreements as Operation-time System Requirements for Emergent Work Community Support Systems”. Authors of this paper are Stijn Hoppenbrouwers, Uwe van Heesch, and Christian Köppe. The management of requirements for automated business processes is in the focus of the third paper. It was submitted by Ilze Bukša, Māris Darģis and Ludmila Penicina. It has the title “*Towards a Method for Integrated Semi-Automated Business Process and Regulations Compliance Management for Continuous Requirements Engineering*”. The fourth paper is presented by Christian Schmitt and Peter Liggesmeyer. It stresses the special important of security requirements. It discusses ideas of structuring security requirements and their reuse. The title of this paper is “*A Model for Structuring and Reusing Security Requirements Sources and Security Requirements*”. Finally an enterprise architecture and knowledge perspective is provided by Mārīte Kirikova. She discusses problems of enterprise architecture management under the aspect of continuous changing requirements. Her paper is entitled “*Enterprise Architecture and Knowledge Perspectives on Continuous Requirements Engineering*”

We are sure that the accepted papers provide an excellent basis for interesting discussions during the workshop. Additionally, the publication of the papers gives readers that were not able to come to Essen the opportunity to catch some interesting ideas and to contact authors for further discussions.

Many thanks go to the organizers of REFSQ 2015 that provided excellent services supporting the processes of organizing a workshop. Our special thanks go to the authors for their excellent work in preparing papers. They provided the necessary documents also in time. Last but not least we would like to thank the members of the PC of the workshop for providing their helpful hints in a very short time.

We hope that there will be interesting discussions during the workshop and also fruitful follow up activities.

## 2 Program Committee

- Robert Andrei Buchmann – *University of Vienna, Austria*
- Peter Forbrig – *University of Rostock, Germany*
- Janis Grundspenkis – *Riga Technical University, Latvia*
- Michael Herczeg – *University of Lübeck, Germany*
- Marite Kirikova – *Riga Technical University, Latvia*
- Oscar Pastor Lopez – *Universitat Politècnica de Valencia, Spain*
- Jolita Ralyté – *University of Geneva, Switzerland*
- Ahmed Seffah – *University of Lappeenranta, Sweden*
- Marcin Sikorski – *University of Gdansk, Poland*
- Chris Stary – *Johannes Kepler University Linz, Austria*
- Janis Stirna – *Stockholm University, Sweden*