



Växjö University, School of Mathematics and  
Systems Engineering (MSI)

Applied Research in System Analysis (ARiSA)

S-351-95 Växjö, Sweden

Welf Löwe, Prof. Dr.  
Phone: +46 470 70-8495  
E-mail: welf.loewe@msi.vxu.se

Rüdiger Lincke, PhD Student  
Phone: +46 470 70-8051  
E-mail: rudiger.lincke@msi.vxu.se

## 1<sup>st</sup> Newsletter (May – August 2006) of KK-project Validation of Metrics-Based Quality Control

### Overview

#### Audience:

- Project partners (Alstom Power, Artisan, Combitech, Windh)
- VXU's and MSI's PR division
- MSI's collaboration group
- KK foundation
- ARiSA research group

#### Participants

ARiSA:	Rüdiger Lincke, Welf Löwe
Alstom:	Per Ranstad
Artisan:	Slavica Stjepanovic, Sören Strömberg
Combitech:	Kjell Karlsson, Andreas Nilsson
Windh:	Emil Eifrem

#### Purpose

Inform about activities in the report period.

#### Period

May 2006 – August 2006

### Activities

The following activities and events can be reported for the specified period.

#### Randis system analyzed as kick-off project

Combitech submitted its project RANDIS as first project to be analyzed. It is an open source system written in Java. Our analysis tool, the VizzAnalyzer, has been adapted such that the relevant information from the RANDIS can be extracted. Currently, we perform a “First Contact Analyses”, which should be finalized by the end of September.

#### Scientific papers published

Our project (outline and goals) has been documented in a scientific paper under the title:

R. Lincke and W. Löwe:

Validation of a Standard- and Metric-Based Software Quality Model.

In proceedings of the 10<sup>th</sup> ECOOP Workshop on Quantitative Approaches in Object-Oriented Software Engineering (QAOOSE2006).

It is available for download at: <http://www.arisa.se/files/LL-06.pdf>. In this paper, we documented the scientific approach of the project. Rüdiger Lincke discussed it with researchers in the field of software measurement at the workshop. In general, the scientific community supported our ideas. We received useful feedback: Additionally, a French company showed interest in our experiment.

To facilitate our research, we need an appropriate measurement tool as foundation of our analysis. We described scientific foundations of this tool in two papers with the title:

Dennis Strein, Rüdiger Lincke, Jonas Lundberg, and Welf Löwe:

An Extensible Meta-Model for Program Analysis.  
In proceedings of the 22<sup>nd</sup> IEEE International Conference on Software Maintenance (ICSM2006).

Dennis Strein, Hans Kratz, and Welf Löwe:  
Cross-Language Program Analysis and Refactoring  
In proceedings of the Sixth IEEE International Workshop on Source Code Analysis and Manipulation (SCAM2006).

They are available for download at: <http://www.arisa.se/files/SLLL-06.pdf> and :  
<http://www.arisa.se/files/SKL-06.pdf>, respectively. Both papers were accepted for publication and will be presented at ICSM2006 and SCAM2006, respectively, at the end of September.

### **Project organization**

For organizing the project and as part of the formal requirements of KK foundation we created a number of planning documents:

1. A refined project plan, especially focusing on activities 2006, has been created.
2. A communication plan has been created. This newsletter is actually an implementation of activities outlined in this plan.
3. The project agreement has been signed by all parties and was submitted to KK-foundation.
4. The project, its partners and the activities are documented on our homepage:  
[http://www.arisa.se/index\\_projects.html](http://www.arisa.se/index_projects.html).

On the homepage, you will find copies of the documents listed above. Even this newsletter will be published there.

### **Project Kick-off workshop with Alstom Power.**

The actual project kick-off workshop took place in February 2006 at Växjö University. This workshop fixed the planning for 2006. Since Alstom Power couldn't participate then, we organized a separate workshop at Alstom Power's in order to adjust the planning with them as well. Also, we took the chance to spread the words about our project in this company.