Most software comes into existence in a field of tension/cooperation between two partners, the person(s)/organisation producing the software product and the person(s)/organisations using/acquiring this software. This is emphasized in the software standard ISO 12204 [2] and also in the improvement standard ISO TR 15504 [3] by including an acquisition and a supply process into the description of life cycle processes [1][4].

In this workshop three views on software production have been integrated:

**Software Process and Product Improvement** initiated and chaired by Gerhard Chroust, Kepler University Linz, Austria,

**Software Reliability Engineering** initiated and chaired by Karl-Erwin Grosspietsch, GMD, Germany, and

**Software Organisations and Business Processes** initiated and chaired by Veikko Seppänen, University of Oulu, Finland.

These three views are related to the following observations:

- The quality of software products is a key issue for the industry at large. The improvement of software products is intrinsically linked to the performance and improvement of the producing development processes.

- Reliability is not something 'aside', it has to be conscientiously engineered. Software Reliability Engineering (SRE), refers to those software production processes that design reliable performance and functionality into information and knowledge processing systems.

- Software systems are still developed by people, rather than by automatic tools. They are meant to provide direct business benefits for the developing organisations or individuals. Despite of this, rather little attention has been paid to the challenges and pitfalls occurring in software production organisations and software related business processes.

The quality of the software product can be evaluated and/or considerably influenced in many different ways:

- At the end of the development (and possibly at selected milestones during the development) the product can be tested (cf. session 'Software Testing'). Despite its usefulness testing has always the problem that it based on an executable and therefore more or less fully implemented version. This means that testing occurs often too late in order to cause radical changes in the tested product.

- A better chance have methods which can be applied very early in the production chain, e.g. inspections or formal proofs (session 'Validation of Software').

- Even before initiating a full fledged development project it might be more advantageous to acquire predeveloped, already existing software. A precondition is to initially define the structure of the final product to be produced, cf. session 'Safety Critical Systems'.

- The way software is developed (the 'development process') has considerable influence on the quality of the resulting system, therefore the session 'Management of the Software Process' is devoted to managing and improving such processes.

- The process of building software itself is in many aspects a business process like many others, therefore this aspect is stressed in the session 'Software Organisations and Business Processes', including management issues of improvement and of soliciting requirements.

In total 17 paper will be presented in the workshop, having 32 authors from 7 different countries.
I would like thank the authors of all papers for their effort to contribute to this event. I would especially like to thank the organizers of the special sessions, Erwin Grosspietsch and Veikko Seppänen for their initiative to organize these sessions. For support in evaluating and selecting the programme I would like to thank my two co-chairmen, Konrad Klöckner and Veikko Seppänen, and the members of the Programme Committee.

Gerhard Chroust
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Literatur


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