1st IEEE WoWMoM Workshop on Autonomic Wireless AccesS 2007 (IWAS07)

Message from co-chairs:

Access networks and wireless terminals are becoming more and more complex, and they include support for multiple wireless technologies. Access networks are dynamically optimized for applications under different conditions, and service performance is affected by a large number of parameters and control algorithms. From the end users perspective, however, multi-access networks are desirable only if they do not deteriorate the quality of experience. For the operators it is of vital importance that operating multiple networks is not more costly than operating one traditional access network. It is therefore essential to minimize operational effort and cost and add intelligence to terminals, network elements and management tools through the adoption of Autonomic Communications and Computing (ACC) principles for self-configuring and self-optimizing access systems.

This workshop is the first to specifically address the need for autonomic behaviour in the wireless access network. Our purpose was to bring together researchers both from industry and academia. Indeed, the majority of submitted papers were by joint industry/academic or industry teams of authors. Six of the accepted papers seem to be by researchers in industry lead projects, the rest are either by joint industry/academic teams of from university groups.

Autonomic Communications is being researched on many fronts, however, the number of papers from industry submitted to this workshop, and the quality of those accepted, gives testament to the wireless access network being the likely focus of the first broad real-world deployments of autonomic principles in communications networks.

Optimising the use of multiple wireless network technologies while reducing operational expenditure and ensuring a constant flow of new services to the user requires concerted research worldwide in designing, comparing and selecting appropriate autonomic techniques for self-configuration and self-optimisation.

This workshop provides an international forum where such activities can begin. However it is up to industry to ensure that the rush to apply autonomic techniques to wireless access network does not come at the expense of the interoperability and resulting mobility which are at the heart of the success of wireless services.

We hope this workshop, by bringing together the best industry-led research into autonomic wireless access networks, will provide a springboard for industry-wide discussions on the adoption of autonomic techniques.

IWAS07 Chairs

- Prof. Raimo Kantola, *Helsinki University of Technology TKK, Finland*
- Dr. David Soldani, *Nokia Siemens Networks, Finland*
- Dr. Dave Lewis, *Trinity College, Ireland*