

# 1<sup>st</sup> European Workshop on Wireless Sensor Networks (EWSN) Berlin, 19.-21. January 2004

## Chair

Adam Wolisz, TU Berlin

## Program Committee

Holger Boche, Heinrich-

Hertz-Institute, Berlin

Erdal Cayirci, Yeditepe

University Istanbul

Kurt Geihs, TU Berlin

Paul Havinga, University

Twente

Holger Karl, TU Berlin

Thomas Lentsch, Infineon

Ian Marshall, BT exact

Friedemann Mattern, ETH

Zürich

Chiara Petrioli, University

„La Sapienza“, Rome

Radu Popescu-Zeletin, FhG

Fokus

Jan Rabaey, University of

California at Berkeley

Herbert Reichl, FhG IZM

Lionel Sacks, University

College London

Thomas Sikora, TU Berlin

Jochen Schiller, FU Berlin

Martin Vetterli, EPFL

Lausanne

Andreas Willig, Hasso-

Plattner Institute Potsdam

Adam Wolisz, TU Berlin

Michele Zorzi, University

Ferrara

Richard Zurawski, ISA Corp.

## Organization Committee

Holger Karl, TU Berlin

Andreas Willig, HPI

## Scope

Wireless sensor networks (WSN) - networks of tiny, autonomous devices equipped with wireless communication - are a topic of active research in a number of different research communities, ranging from hardware to applications. WSNs are characterized by a need to carefully integrate functionalities traditionally considered to be separate in order to achieve maximum efficiency, especially with regard to energy consumption and management. Hence, a close interaction of research from different backgrounds is required. Additionally, WSNs are evolving from simple data transportation networks to functionally rich distributed systems, e.g., because actuators in the network have to be supported.

The goal of this workshop is to bring together researchers from different backgrounds, from hardware to applications, to create a forum where cross-layer integration, novel solutions for specific problems, and the future development of WSN functionalities can be discussed.

We encourage contributions describing innovative work on WSN. Areas of interest include, but are not limited to:

- Hardware for WSN, e.g.: transceiver concepts, wakeup radio, antenna design, system integration, process and cost of manufacturing, battery technology, energy scavenging

- Communication protocols, e.g.: MAC and link layer problems; routing and transport protocols suitable for WSN, redundancy, aggregation support, and mobility support; supporting functionalities like locationing and synchronization

- Source coding techniques appropriate for WSN, e.g., to support data fusion; distributed signal processing

- Distributed control and actuation

- “Middleware” for WSN, e.g.: Configuration and installation support, lookup of available functionalities, group communication, distributed algorithms in WSN, in-network processing and storage of data, harmonizing node-centric and data-centric addressing,

- Gateways to fixed Internet and integration of WSN into Internet middleware architectures

- Security, e.g.: primitives for appropriate cryptographic protocols, secure system engineering

- Applications of WSN, e.g.: novel applications and their requirements such as medicine, environment control, etc.; experiences with real-world applications

- What part will WSNs play in realizing the visions of ubiquitous computing & communication and Ambient Intelligence?

## Important Dates:

Submission deadline: 1. July, 2003

Notification of acceptance: 1. September, 2003

Camera-ready version: 1. October, 2003

Work-in-progress submission: 15. November, 2003

Supported by the Joint  
IEEE IAS/PELS/IES  
German Chapter



Submissions should not exceed 16 pages; formatting guidelines are described on the webpage. The proceedings will be published by Springer in the **LNCs** series.



For more information, please visit: <http://www.ewsn.org>