

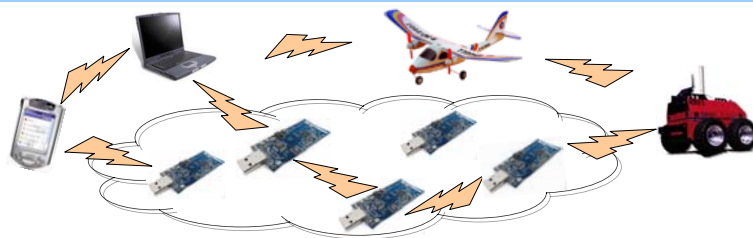


Coordinating European Research on Wireless Sensor Networks and Cooperating Objects

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Cooperating Objects

- Autonomous devices endowed with *computing, communication, sensing* and/or *actuating* capabilities
- Cooperating Objects collaborate each other to achieve a global common goal
- Typical applications: building automation, monitoring of dangerous goods, patient surveillance
- **Problem:** many isolated research efforts across Europe



Project Information

Embedded WiSeNts

- Cooperating **Embedded** Systems for Exploration and Control featuring **Wireless Sensor Networks**
- Coordination Action, 6th FP
- From September 2004 to August 2006

Partners

- A Consortium of 12 Partners from 10 European countries
- Cooperating Industrials: ABB, SAP, Microsoft, Infineon, Siemens, DoCoMo, T-Systems, STMicroelectronics

Contacts and Links:

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Project Goals

Education & Training

Development of joint education activities

- 1. Summer School.** *International Summer School on Wireless Sensor Networks and Smart Objects.*
 - 60 participants (180 applicants)
 - Lectures and practical labs
 - Application competition
- 2. Teach-ware improvement and dissemination.**
Provide teachers and students with teaching material:
 - Web site as exchange platform
 - Development of adequate teach-ware modules
- 3. Student Mobility.** Financial support for master and PhD students to visit other institutions and labs.

Research Integration

Integration and Harmonization of European research

- 1. Research Facilitation: Platform and Tools.** Improve communication and cooperation and minimize unnecessary duplication of effort.
 - Platform survey
 - Discussion forums
- 2. Distinguished Visitors Program.** Encourage visits of distinguished researchers to partner institutions.
- 3. Workshop Organization.** Establish the *European Workshop on Wireless Sensor Networks (EWSN)* as a scientific exchange forum.



Road Mapping & Technology Adoption

Survey of the state of the art and development of a critical research agenda

- 1. Studies.** A survey of today's state of the art and open research issues by the mean of the following studies:
 - Applications and Application Scenarios
 - Paradigms for Algorithms and Interactions
 - Vertical System Functions
 - System Architectures and Programming Models
- 2. Visions for innovative applications.** An attempt to envision potential disrupting future applications of Cooperating Objects.
 - Whitepaper on visionary applications
 - *Sentient Future Competition*
- 3. Research Roadmap preparation.** The studies and the visionary applications whitepaper serve as a starting point for the *Research Roadmap* document. The roadmap will:
 - Estimate time and effort for on-going and additional research
 - Identify research areas requiring special attention in the near future
 - Suggest organizational and funding measures for future research
 - Provide guidelines for the analysis and solution of specific problems for the realization of applications

