

---

# RWI Breakout Session Summary

Albena Mihovska

ASPIRE Co-Technical Manager

Center for TeleInFrastruktur (CTIF), Aalborg University, Denmark

albena@es.aau.dk

# Participants

---

- Mirko Presser,
  - Manfred Hauswirth, Claudia Diaz,
  - ASPIRE; SENSEI; C-CAST, AWISSNET, WISEBED, FIRE,
  - Full details on : [www.ict-sensei.org/fiawiki](http://www.ict-sensei.org/fiawiki)
- 
- RWI community is growing (CuteLoop, EPoSS)
  - Workshop is envisioned at the end of February 2009

# RWI Essentials and Challenges

---

- RWI: implied by the uprise of technologies (e.g., RFID; sensor networks, short-range) and their commercial introduction
- Based on solid technological advances it poses a number of questions:
  - Do we need RWI and why?
  - How do we manage and scale RWI networks (e.g., heterogeneity of devices and users, large variety of context and networked knowledge)?
  - How do we handle security, privacy and trust?
  - How do we handle storage and querying of dynamic information?
  - How do we integrate successfully the social aspects?

# RWI Challenges Ahead

---

- Scalable semantic infrastructure needed
- Advanced context functionalities for transparency and awareness
- Security and privacy protection in the RWI?
  - Privacy protection mechanisms needed alongside with surveillance technologies uprise to bring about sufficient security
  - Transparency
- Trust establishment in an ad-hoc manner (on-the-fly) : imposed by heterogeneity and the huge number of sensor nodes that need to be interconnected
- Merge technological advances to business processes

## Some more things to consider...

---

- Mediate interaction between applications or parts of the application through choice of an appropriate architecture
  
- Trend towards ubiquitous computing, mobility and dynamic reconfigurability: are RWI solutions 'innovation-proof'?
  
- How do we ensure consistent observation, security, trade offs between autonomy and interdependence for the different subsystems, definition and implementation of resource management policies
  - COLLABORATION is KEY!