# Conclusions - 1

- **Sensor networks offer potential benefits:**
  - Health (chronic disease management, reduction in hospitals)
  - Environment (monitoring, precision agriculture, smart grids, industrial applications)
  - Transport (efficiency gains for supply-side (infrastructure providers and transport services) leading the introduction in the market and for customers)

- **Technology: heterogeneous – mainly in demo or trials**
  - Many basic ingredients are ready and available in the market (cell phones, algorithms).
  - Difficulties are mainly associated with technical integration and organizational issues (different lifecycles for infrastructure )

  - Sensor power is an issue
  - Biosensors are less mature than other sensors and in need of funding
  - Scalability of applications is an issue,
  - Standards remain an issue

# Conclusions - 2

- **Potential market for sensor networks:**
  - The needs seem to exist (society or individual needs) but:
    - Willingness to pay by patient/consumer /citizen will be key in many applications
    - Investment and financing are not always there – depending on risks - ROI is generally uncertain
  - Most **business models** are based on cost-avoidance – but new ones are emerging that still need to be tested (eg. Data aggregation and profiling)
    - Currently cost seems to outweigh benefits in many applications
    - Where there is cost reduction or where systems can be distributed: low risk and business models can be sustainable

# Conclusions - 3

- **A key issue is data/information management**
  - What data can be processed by sensor networks?
    - The more convergence of data originating from different sources (sensed data, location-based information – GPS, climate…), the bigger the issue – privacy and security
    - The more users which can access the data, the bigger the issue – privacy and security

- Another key issue is **legal liability**

- **Multidisciplinarity** should include involvement of users, privacy and security experts from early stages of development to deployment

  (it would foster building in requirements from the outset rather than after the fact and have a positive impact on acceptance)

# Conclusions – 4

## Should Governments intervene? To do what?

- **Funding for R&D?**
- **Reviewing economic incentives?**
  - Health
    - Special sector - significant misalignment of incentives
  - Environment:
    - Market failures (public goods)
  - Transport:
    - For public transport, subsidization of service affects innovation and may prevent market competition
- **Providing guidance for implementation of privacy and security?**
- **Fostering Interoperability / open source?**
- **Other?**

Report to OECD and consideration of possible action in the context of the Innovation Strategy