## OECD Conference on Empowering E-Consumers: Strengthening Consumer Protection in the Internet Economy E-commerce Trends and Outlook: Consumer aspects Washington DC, Madrid, 8-10 Dec 2009

## Luis Magalhães

Knowledge Society Agency (UMIC)

Ministry of Science Technology and Higher Education, Portugal



## Points to Address

- → New means of e-Commerce (different devices)
- → New aspects of e-Commerce (different applications)
- Expected future developments
- → Building trust/confidence. Assuring privacy
- Modernizing e-Commerce metrics/indicators and data gathering



### New Means of e-Commerce

Different devices w/ high penetration in the population:

- Cell phones (in Portugal: penetration in the population) 113%)
- ATMs (in Portugal: 60% of population 16-74 y.o. uses) them for e-commerce; highest penetration of ATMs in the population in EU, 1,500 per million population (+15% than Spain, +50% than UK, > double EU)
- Sensor-based networks (in Portugal, RFID for highway tolls: 200 million instances 120 million € per year; 66% of all instances of use; highest penetration in EU, 22% of total population (> 2.5x Italy, > 11x France)

These means dominate now-a-days. e-commerce through Internet pages is comparatively small.

(in Portugal: only 10% of population 16-74 y.o



# New Aspects of e-Commerce

#### Different applications:

- e-marketing
   (>> people use the Internet for obtaining information to decide what to buy than just to order or pay)
- Web 2.0 C2C
- Reinforced by combined effect of both (importance given by consumers to interaction with other consumers to decide on what to buy)
- Cloud Computing



# **Expected Future Developments**

- More mobile (order and pay wherever you are)
- More sensor-based (order and pay as you go)
- Easier to use interfaces, as touch screen and voice interfaces (like ATMs but more flexible)
- Interactive e-commerce (e.g., tailoring products to customer orders)
- New disruptive business models for the network economy
  - (e.g., open access scientific publications—SCOAP<sup>3</sup>, health ambulatory care with sensors of health parameters, environmental management with sensor based networks)

# Building Trust/Confidence & Assuring Privacy

#### Main consumer protection issues:

- Improvement in network and information systems security. In particular, against identity theft and spoofing
- Better signaling of reliable providers (certification/reputational schemes, in particular by enterprise associations)
- Adequate legislation and guidelines for C2C
- Special care with privacy in sensor-based networks. The right to delete information.



# Modernizing e-Commerce Metrics/Indicators and Data Gathering

#### Presently out-dated.

- Have to adapt to new devices of e-commerce: cellular phones, ATMs, sensor-based networks, other computer mediated networks
- Have to adapt to new aspects of e-commerce: e-marketing, web 2.0 –C2C, interactive e-commerce
- Data gathering would need to use both surveys and information flow data