



MINISTRY OF TRANSPORT  
AND COMMUNICATIONS FINLAND

# Ubiquitous Information Society

Digital Home and Its  
Networks/25.10.2006/Kristiina  
Pietikäinen



”Inventions have long since reached their limits, and I see no hope for further developments” (Roman engineer Julius Sextus Frontinus)

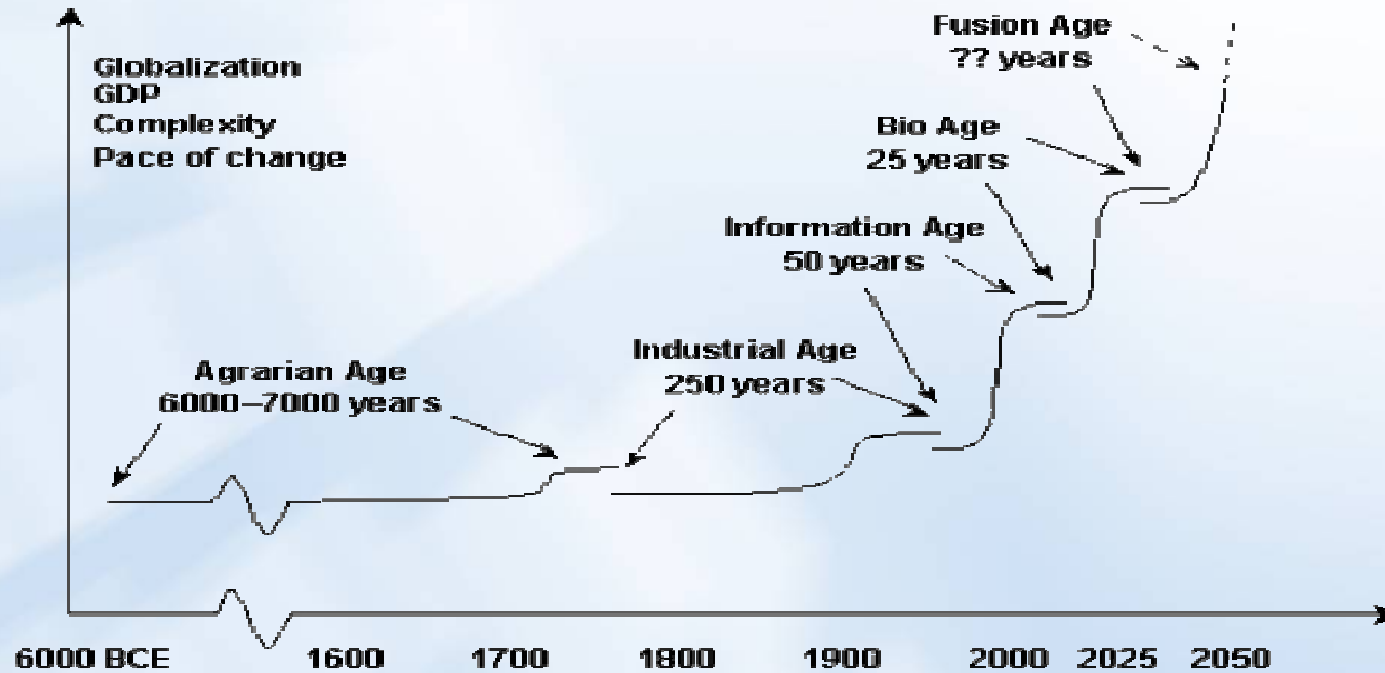
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”Technology advancement will not stop”  
(Naoyuki Akikusa, Fujitsu, i2010  
conference 2006)



# Matti Lehti: "digitalisation is the third industrial revolution"

Big waves of societal change (M. Mannermaa)





## From Technology-Push to People-Pull

- Production on content will become the driving force
- People are expecting that technology will satisfy their needs and provide them with services
- Ubiquitous society provides us with new tools that enable the real use of services and contents -> it is therefore a relevant paradigm for the future information society
- Learning/Knowledge/Service/Interaction society **vs.** A society for stupidity and superficiality (information overload, reality tv, gossips etc)



## Who is on board, Who needs to get on board?

- Consumers are very much on board; broadband usage, new games, virtual societies, blogs etc.
- Are the citizens on board (e-services)
- Are all consumers on board (disabled and elderly)?



## U-strategy = Information Society for everyday life

- **Why:**
  - Next Generation Networks and the future of Internet
  - Technology is getting cheaper and multipurpose
  - Internet of Things is emerging
    - connecting people → connecting everything
  - great application possibilities available
    - = Information and communications services are present in the everyday life of ordinary people anywhere and anytime.
  - The Asian example (Japan and South-Korea) and global competition



# *U-Society* (M. Mannermaa)

**B2B**



**B2C**



**C2C**



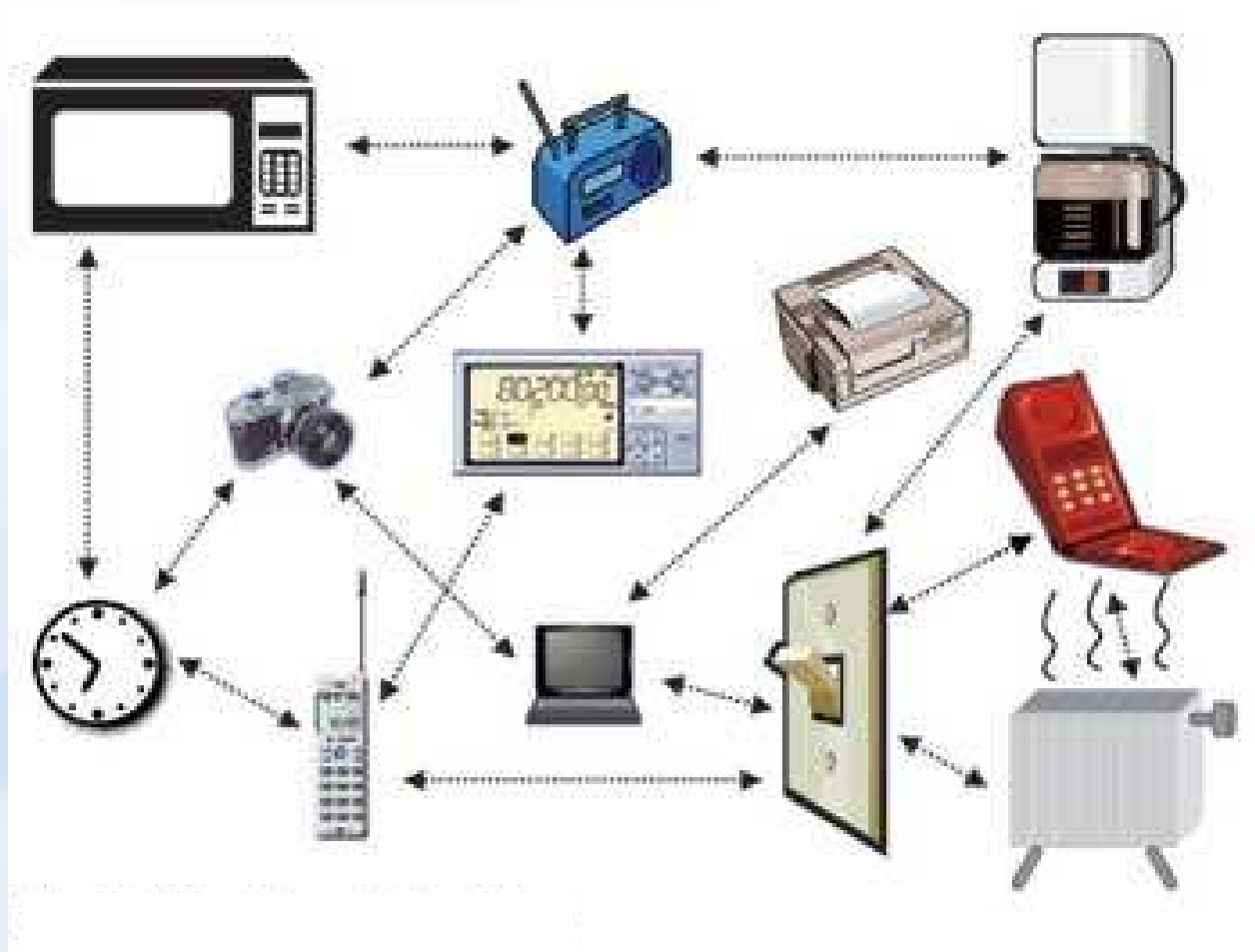
**P2P**



**P2O**

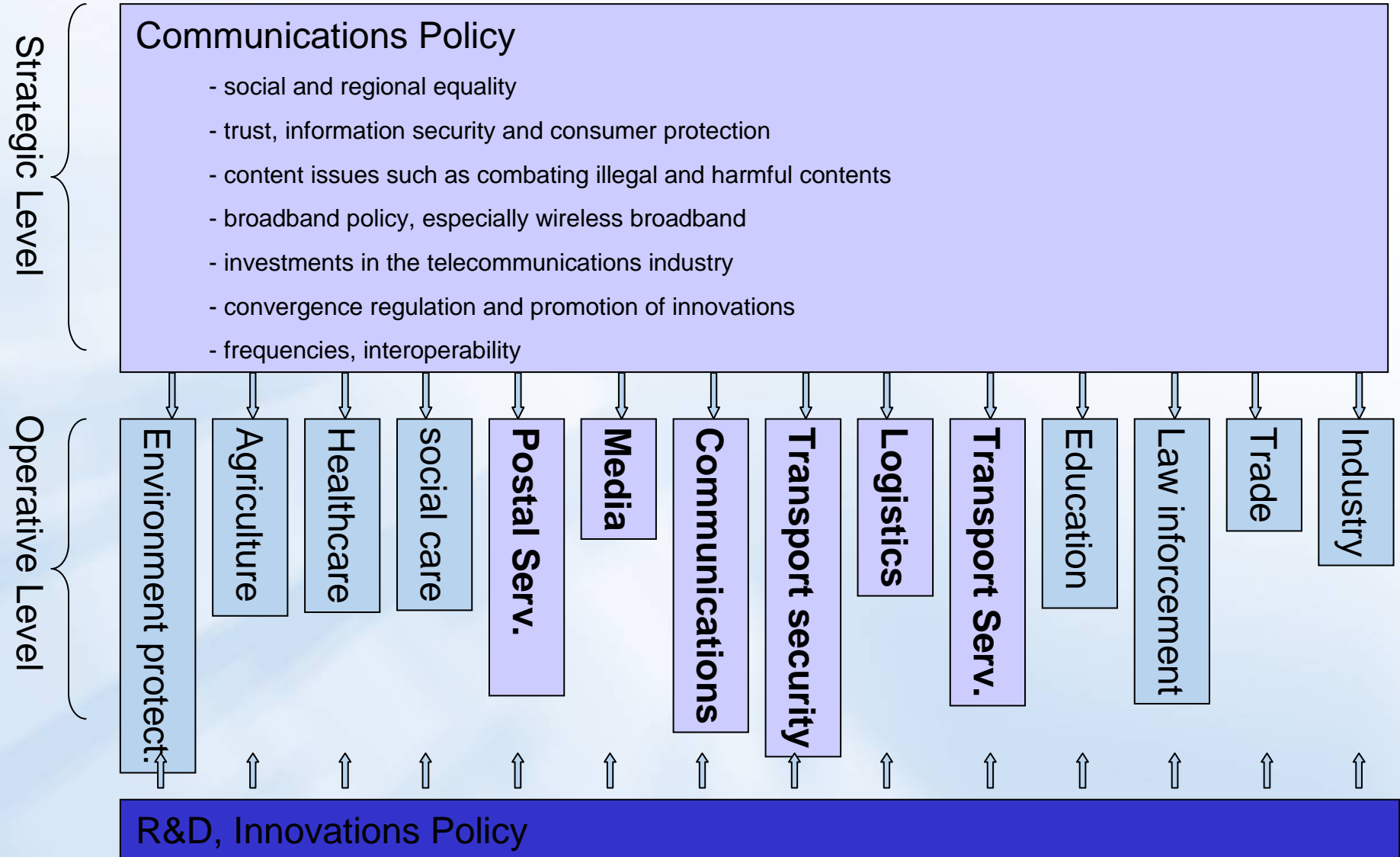


**O2O**





## Ubiquitous Information Society Policy





## Examples:

- **Technology drivers:**
  - Convergence
  - Rfid + other sensor technologies
  - IPV6
  - Next Generation Networks
  - Voip
  - IpTV..
- **Applications :**
  - e-Health (telemedicine applications)
  - Logistics; product information (intelligent packages and packing material)
  - Self-service: such as automatic cash-functions
  - Intelligent devices; cars, mobile devices, clothes, etc.



## Why u-policy

- to create favorable circumstances for the new services (future-proof regulation, effective internal markets, innovation-friendly markets)
- to create trust (privacy, security, consumer's rights, basic rights)
- to provide equal access (social and regional)
- **In Summary: to strengthen equality, well-being and competitiveness**



# Main Communications Policy Questions:

- Broadband Policy
- Competition in the communications markets (upcoming regulatory reform of the EU's electronic communications legislation)
- EU's frequency policy
- Trust and Security (new forms of information security threats, critical infrastructure protection, emergency services)
- Consumer questions (easy to use, interoperability, standard, protection of consumer's rights, liability questions)
- Media/Content Policy (Public Service TV, quality of content, etc.)



## Effects for the Disabled and Elderly

- The U-society has great potential:
  - Strengthen public services; e-health, education, transport-systems
  - Make the everyday life more easy
  - Provide better accessibility with variety of technologies
  - Increase consumer choice
  - Lower prices



## Challenges for the Disabled and Elderly

- User friendliness
- Accessibility
- Affordability
- Training
- Motivation
- Security



## Ministry's Action Plan for Accessible Communications

- Utilisation of broadband
  - Digital television
  - Websites
  - Emergency services
  - Directory services
  - Easy-to-use terminals
- > New u-technologies provide new ways of providing traditional services; more channels, more languages, more delivery modes (audio, video, graphic..)
- > There are no technical limitations really. All depends on the will to make a difference



## Some Considerations:

- **Technology as an enabler or equalizer:** not automatically, needs a regulatory commitment
- **Technology and politics:** do we have common political aims how to use the technology, is inclusion really politically important
- **What is our vision for ubiquitous society;** what kind of values and ethics it consists: social justice, pluralism, cultural diversity, welfare