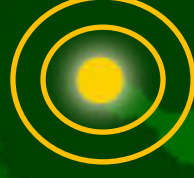


The Future Internet Public-Private-Partnership  
2<sup>nd</sup> Future Internet Usage Areas Workshop  
Session 1 Smart cities / utilities & Environment  
Brussels, 21 June 2010



## FI PPP Oulu Use Case Approach

Oulu – some innovation facts

- 1 - Oulu Smart City use case and scenario
- 2 - Innovative internet functionality and technologies
- 3 - Expectations from the FI core technology platform
- 4 - Experimental environment expectations
- 5 - Potential role of CIE/Oulu University



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**Mika Rantakokko**  
CFO

## Some innovation facts about Oulu

- Top level R&D exp. per capita: 11,5 %/GDP (3.250 €/inh./year)
  - Wired Magazine ranked Oulu #3 "Silicon Valley" in late 90's
  - Long tradition of co-operation – Triple/Quadruple Helix
  - Advanced innovation infrastructure
- Globally strong in ICT sector: 14 000 ICT jobs in region
  - The world's first wrist watch heart rate monitor 1980
  - Forerunner in social media, IRC - Internet Relay Chat – 1988
  - The world's first GSM call 1991, first WCDMA call 1996
  - Free open source 3D virtual world platform realXtend - 2008
  - The first phone call over a cognitive radio network 2010



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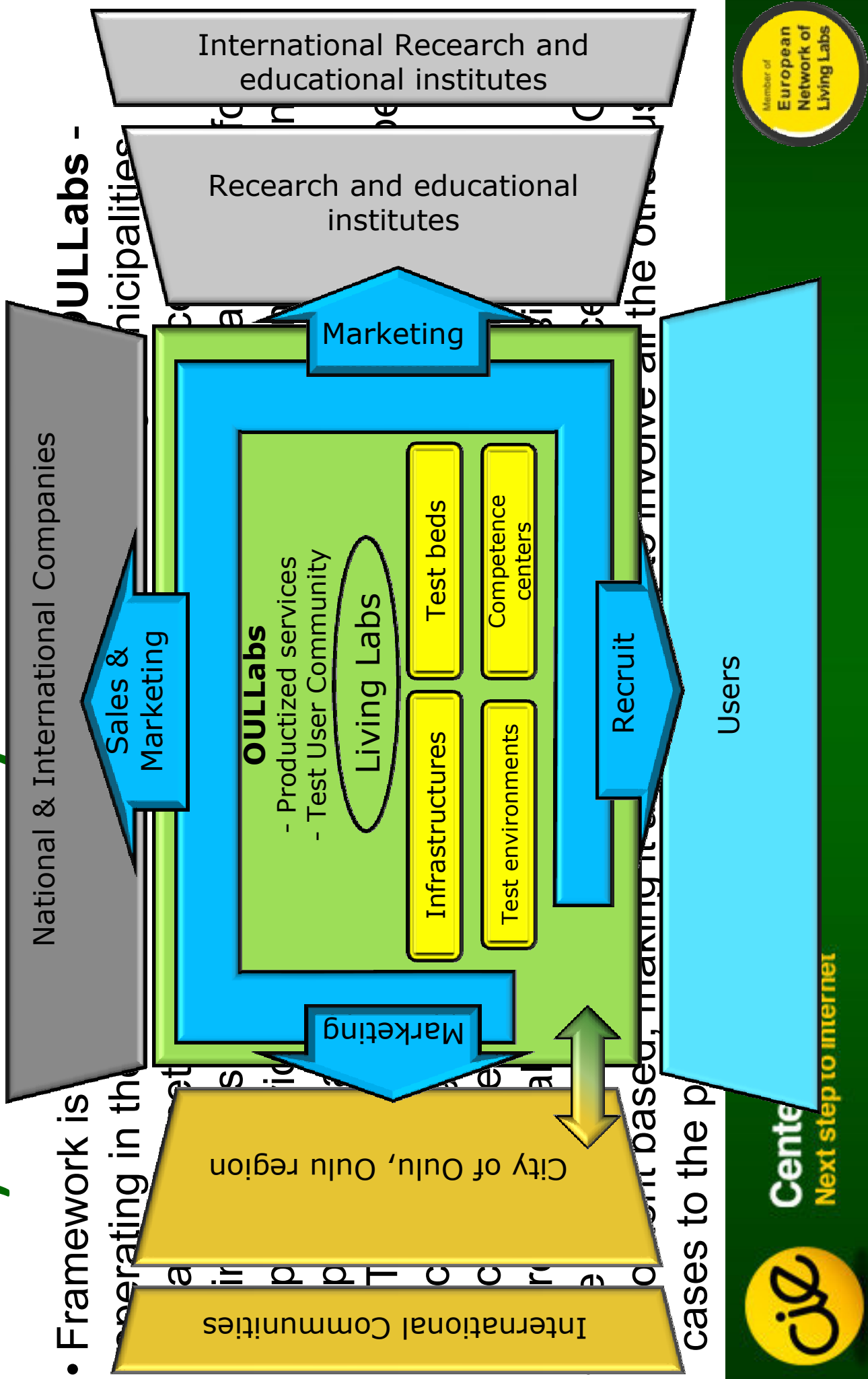
## “Internet everywhere – the next opportunity”

- CIE aims to create **internet-driven growth opportunities** by combining cutting-edge innovations and open networks with agile business creation.
- CIE’s role is to combine the best ideas, people and resources from different fields for **co-creation of next generation internet technologies, appliances and services**.
- CIE projects are **multi-disciplinary**.
- CIE drives for the **Living Lab approach** to obtain user-driven innovations to empower ordinary people to experiment and contribute for the Future Internet – **FI Coordinator**



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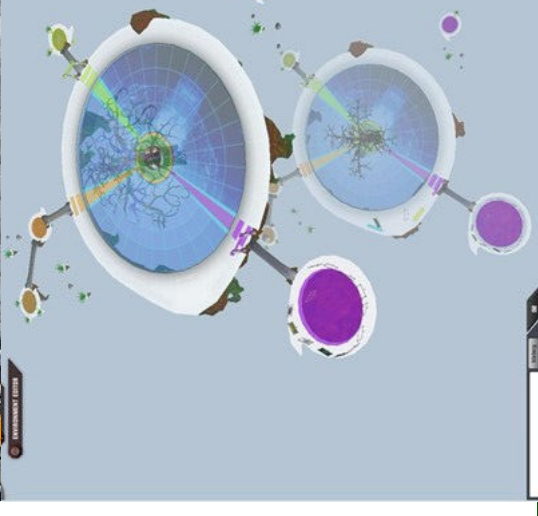
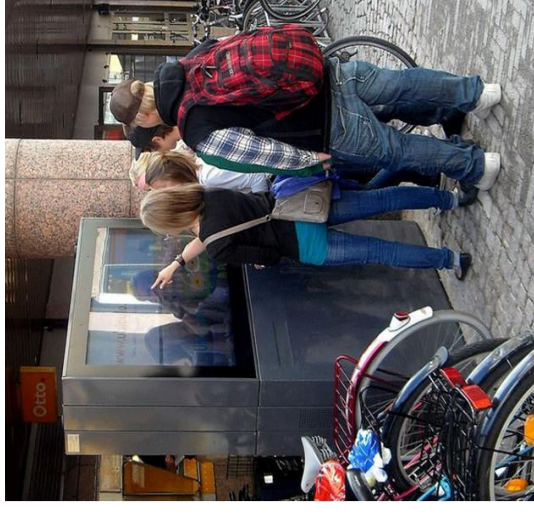
# 1) Oulu Smart City use case and scenario



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## 2) Oulu innovative internet functionality and technologies

- The Oulu Urban Living Labs environment covers various technologies making it possible to process several use cases in this environment, linking the user driven approach, with help of **active Test User Community (TUCO)** to all of them.
- The development work in Oulu takes into account **the growing interest towards 3D internet**, especially from open innovation perspective; almost everything can be linked to 3D internet. This functionality would provide new interesting possibilities both to service and technology developers.



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### 3) Oulu expectations from the FI core technology platform

- Future Internet core technology platform shall enable multifunctionality putting special emphasis on open interfaces/innovation and user orientation.
- Technically and technologically this means access and functionality via all possible equipments as well as sufficient and reliable performance.



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## 4) Oulu experimentation environment expectations

- The experimentation environment shall make it possible to flexibly test different kind of solutions and services in a future-oriented “**too good**” environment
  - Advanced protocols
  - Packaging the support services in an efficient way making it easier to develop new services - one-stop-shop approach
  - 3D fit HW



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## 5) Potential role of CIE/ Oulu in the FI-PPP

CIE as a collaboration organisation and as an active coordinator of OULLabs

- Living Lab/UDI focus on setting up innovation systems and improve the management of innovation networks to collect necessary expertise and to support development of new innovations.
- Smart information systems and Lead User community services to support smart city operations as well as energy, mobility, e - Health, tourism, ecological construction and 3D internet.



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For more information:  
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