Regions and cities as living labs for new solutions facilitated by robotics

How regions can benefit from robotics and how the EU can support innovation processes – Brussels, CoR, 23-11-2017

Jan Larosse

Vanguard Initiatives Consult & Creation

What role for regions?

- Robotics as 'enabler', part of integrated product-service systems
- Digital transition as opportunity for implementing new solutions
- Robots breaking out of the cage: service robots
- Need for experiments:
 - Technology options
 - Work organisation (teams with robots)
 - Societal conditions: economic (cost-benfit); social acceptance
- Real life environments real solutions
- Variety of testing environments needed (big data, to feed AI)

Good practice

- European Coordination Hub for Open Robotics Development (ECHORD++):
- Public end-user Driven Technological Innovation (PDTI): in 'Healthcare' and 'Urban Robotics'
- Various public bodies have submitted different challenges (technology needs); two were selected:
 - Robotics for the Comprehensive Geriatric Assessment (CGA) Challenge
 - Robots for the Inspection and Clearance of the Sewer Network in Cities
- ECHORD++ offers to both the technology developers and the public authorities the chance to closely **interact and interface** with each other during the conception and development of the solution.

Regions and cities as living labs: how?

- 1. Challenge driven innovation policy
 - 1. 'Missions': e.g. affordable, human centric elderly care
 - 2. Role of public procurement
- Integrated solutions (multiple technologies and non-technological conditions): requires technology providers to combine offer (there is no 'pure robotic' solution)
- 3. Digital innovation hubs: connect different technology competences with needs of companies and regions; business models; training; standards & certification.
- 4. Strategic partnerships for smart specialisation investments: avoid duplication and fragmentation; build critical mass
- 5. Embrace 'complexity' of co-creation! Engage in 'joint demonstration' of specialised contributions to the solution of common challenges.