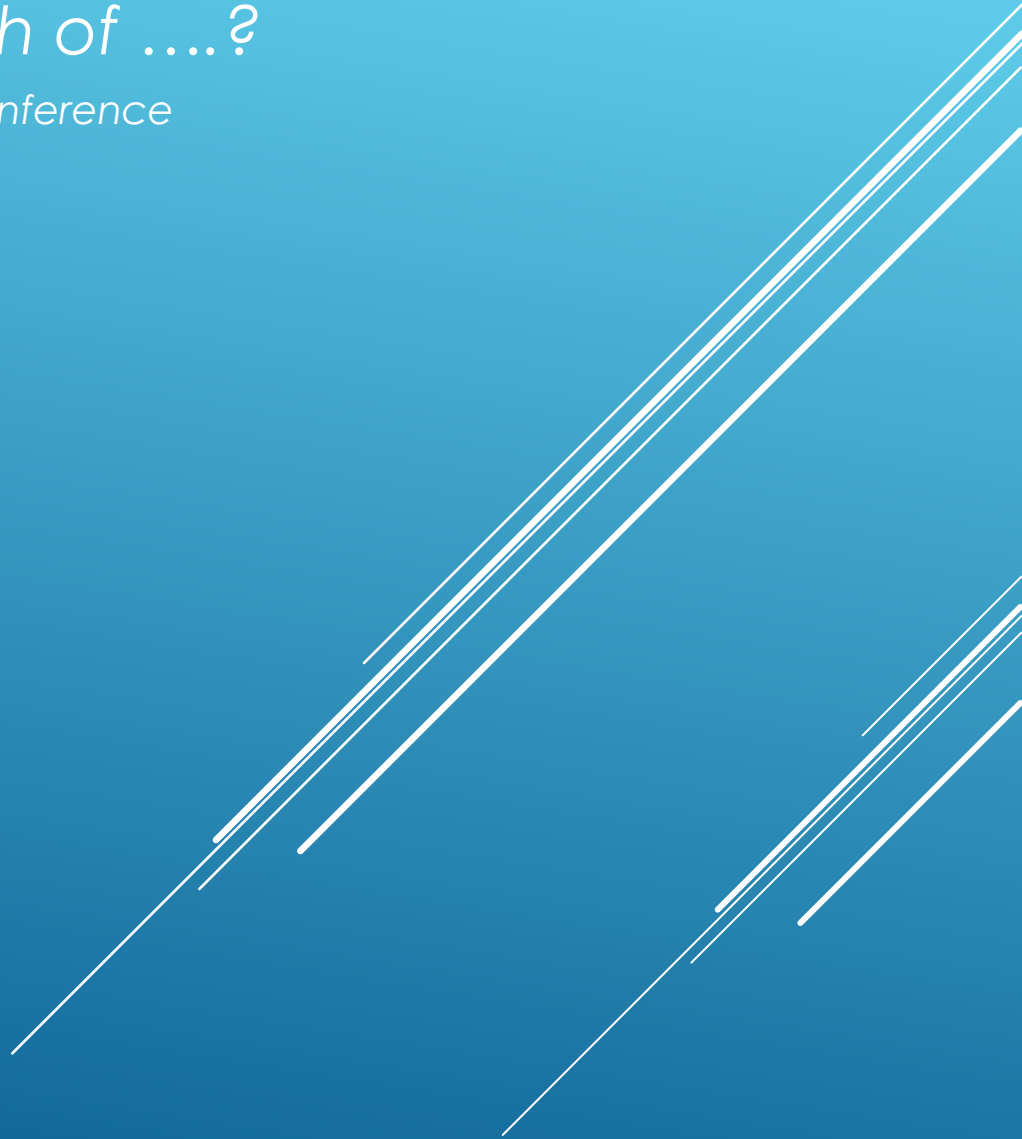


# *Innovation Policy in Search of ....?*

*Presentation for the 6CP 40 Anniversary Conference*

*Vienna 24-25 March 2015*

*Jos Leijten*



- ▶ Urban and regional planning
- ▶ Regional economy, company strategies and regional planning
- ▶ Societal impacts of new technologies, technology assessment
- ▶ ICT policies
- ▶ The future of research
- ▶ Joint Institute for Innovation Policy
- ▶ Key enabling technologies

# INTRODUCING MYSELF

- ▶ Role of government
- ▶ Tax policies
- ▶ Employment
- ▶ SMEs and large companies
- ▶ National innovation systems
- ▶ Fading boundaries
- ▶ Social innovation
- ▶ Does “challenges and/or transitions approach” work at all?

# QUESTIONING CONVENTIONAL WISDOM IN INNOVATION POLICY

## *Increasing complexity of technology systems*

- ▶ From product to system to platform
- ▶ From firm, to market/customer, to value networks
- ▶ From project, to programme, to challenge
- Integrated solutions
- New move to (networked) vertical integration
  - ▶ Market/user driven innovation (reverse product cycle)
  - ▶ Product-service integration
  - ▶ Product chain liabilities
  - Changing the balance between market and politics

# HAS INNOVATION POLICY LOST TRACK OF TECHNOLOGY?

- ▶ Cheaper tools for wide market growth
  - Broad (democratized) usage instead of “high-end” products
- ▶ Networking in all sectors of society
- ▶ Strengthen individual and collective influence
  - The new consumer role (prosumer?) is a sustainable value
- ▶ But it needs to build on shared platforms
  - Easily accessible to build new products and services by users (e.g. 3D printing)

## CHARACTERISTICS OF THE PRESENT

- Understanding old and new value platforms
  - products as a service (personalised mobility)
  - service as a product (mobile telephony)
- How product/services systems move through networks: tools for dynamic life cycle network modeling of technologies and/or products
- Tools to manage the movement from “mass-production to mass-innovation” (Leadbeater)

# INTELLIGENCE FOR INNOVATION

## *Challenges*

- ▶ Complex worldwide interactions
- ▶ Many stakeholders
- ▶ Many different mindsets
- ▶ Multi-level coordination needed for transition

## *Therefore we need*

- ▶ Creation of anticipatory intelligence
- ▶ Collective ideation, visioning
- ▶ Support of decision making
- ▶ Creation of innovation networks and mobilisation of participants

# A NEED FOR SHARING VIEWS ON FUTURE INNOVATION

- ▶ Innovation policy, growth policy and social policies
- ▶ Focus on technology networks and platforms
- ▶ Vision based policies
- ▶ Policies for demand and user driven innovation
  - ▶ Regulation as driver
  - ▶ Procurement is key instrument

# POLICIES FOR INNOVATION



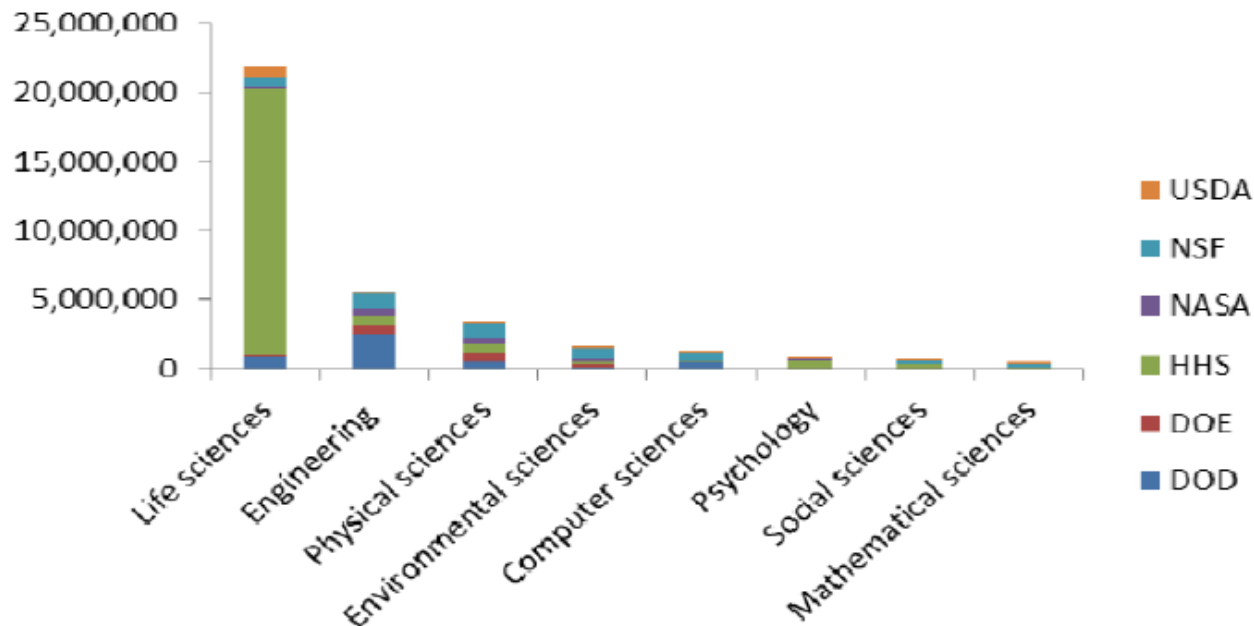


Figure 16: Higher Education R&D: By Agency and S&E Field, 2012(\$ Millions)<sup>32\*</sup>

\*DoD = Department of Defense; DoE = Department of Energy; DoHHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NSF = National Science Foundation; DoA = Department of Agriculture.

## Government Budget Appropriation for R&D, share of GDP, 2011

