### **EARTO Policy Breakfast Hosted by MEP Christian Ehler**

## THE FUTURE OF EU RESEARCH & INNOVATION POLICY



Maria Khorsand EARTO President

## **EARTO: European Association of Research and Technology Organisations**



























### Vision: Technology for a Better World

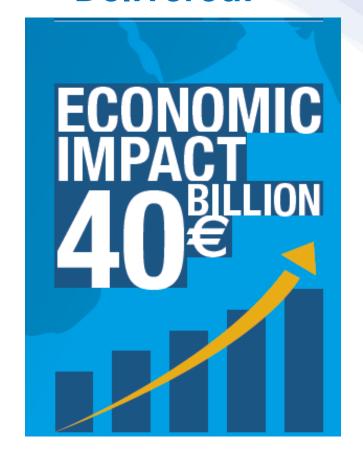






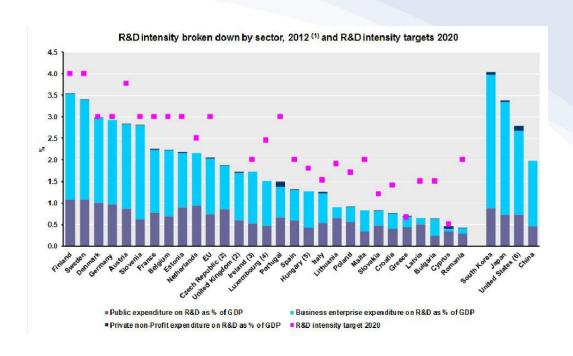


Moto: Impact Delivered!



## Europe Innovation performance lagging behind USA & Asia

- Europe represents:
  - 7% of world's population
  - 25% of global GDP
- Economic crisis
- Decrease of R&I budgets
- Increasing public deficits
- Increasing unemployment

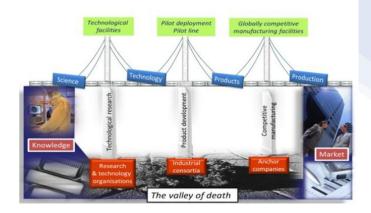


National & Private Investments in Research & Innovation need to be Protected & Encouraged!

### RTOs Crossing the Valley of Death

- EU suffers from a slow process for transferring excellent R&D results into innovative solutions for the markets
- Improving bridging the valley of death will require joint effort from RTOs & industry
- RTOs have key role in developing new infrastructures allowing piloting new technologies
- Bridging the valley of death also means solving societal challenges: RTOs core activities are based on transdisciplinary and user-centric approaches

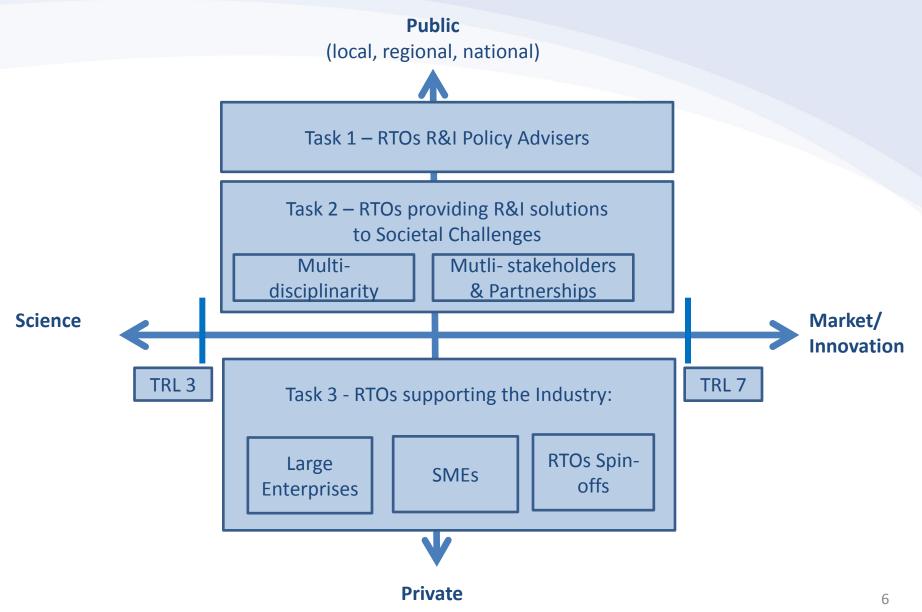
AN INTEGRATED APPROACH TO KETS FOR FUTURE COMPETITIVENESS: THREE PILLAR BRIDGE MODEL TO PASS ACROSS THE "VALLEY OF DEATH"



#### **H2020 Societal challenges:**

- · Health, demographic change and wellbeing;
- Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy;
- · Secure, clean and efficient energy;
- Smart, green and integrated transport;
- Climate action, environment, resource efficiency and raw materials:
- Europe in a changing world inclusive, innovative and reflective societies;
- Secure societies protecting freedom and security of Europe and its citizens.

### **Understanding RTOs Activities**



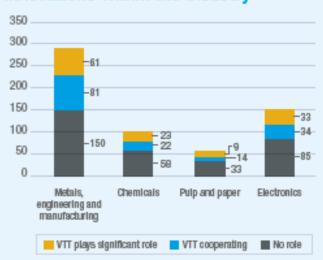
## EU Innovation Performance & RTOs Impact Example of VTT



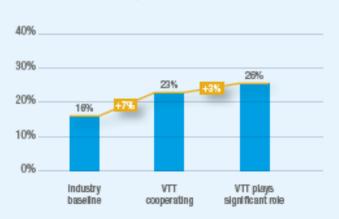
#### EXAMPLE FINLAND

#### Innovations in exporting industries

#### Innovations within the industry



#### Turnover development after the innovation



VTT's role and significance in the innovations of export industries. Increase in companies' turnover after innovation.

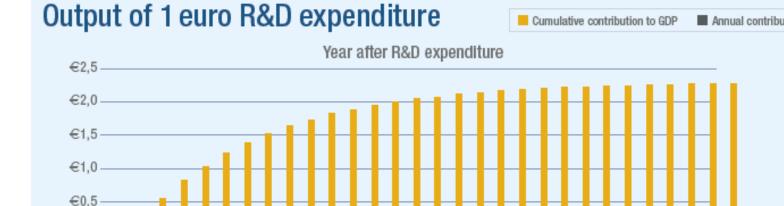
www.vtt.fi

### **EU Innovation Performance & RTOs Impact Example of TNO**



Cumulative contribution to GDP

Annual contribution to GDP



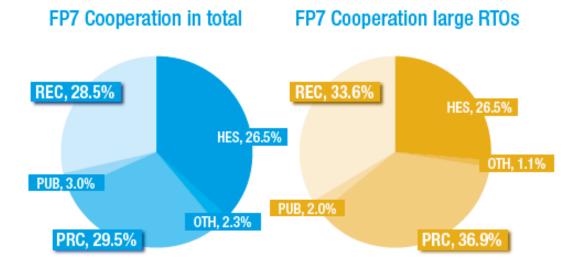
A recent Dutch study has shown that for every 1 euro invested in Research & Development a cumulative (average) effect of 2.3 euro extra GDP will be incurred over the years.

www.tno.nl

## EU Innovation Performance & RTOs Impact Lesson from FP7 for H2020

#### RTOs Supporting Industry Participation in EU Projects

All FP7 Cooperation Projects vs Projects with Large RT0s



HES: Higher or Secondary Education PRC: Private for Profit (excluding Education)

PUB: Public Body (excluding Research and Education) REC: Research Organisations

## EU Innovation Performance & RTOs Impact Example of SP

Strongest Technology
Transfer Pathways

Direct Industry-RTOs
Cooperation via
Contracted Research,
Shared Facilities, etc.





#### EXAMPLE SWEDEN

A recent example is the world class AstaZero research and testing facility built in the south of Sweden to support research and testing into active vehicle safety.

This facility has been more than 7 years in the planning and represents the first full scale test site for future active road safety. The land for the facility was purchased from the local municipality. Necessary infrastructure in the form of access roads etc. was installed using regional funds. Guaranteed funding for between 5-12 years has been secured from both national research agencies and industry as security for bank funding of the remaining investment cost. The facility is owned by EARTO member SP with an academic partner to foster shared use and a broad range of research activities from blue sky to close to market.

www.astazero.com

### **EARTO 2 Recommendations for EU Innovation Ecosystems**

Europe needs to invest in strong value-chains and innovation ecosystems

Europe needs to focus more on delivering impact from EU and national R&I investments





#### FXAMPI F SPAIN

FIK is a private interdisciplinary scientific & technological development initiative in the field of ageing and disability. Its goal is to obtain patentable results that allow the profitability of the enterprise to be optimised and which lead to products and/or services that maximise the personal freedom, independence, health and quality of life of the elderly and disabled whilst simultaneously generating an economic framework.

FIK is made up by 26 investment partners and has a budget of approximately 50 millions euros over a 10-year period (2007-2017) in the context of ageing and disability. FIK partners include: Financial bodies, Industrial groups, Social and health institutions, Mass media, Family investment funds, Public institutions and EARTO member TECNALIA as Knowledge Partner.

FIK approaches a grand challenge in developed societies while also representing a major economic opportunity.

http://www.tecnalia.com/en/health/fik-a-privateenterprise-model/fik-a-private-enterprise-model.htm

### EARTO- EIRMA Conference 2015 Luxembourg 28-29 April 2015

# Industry & RTOs Sharing Research Facilities & Resources







