Science2Society – Boosting innovation efficiency across Europe

BESTPRAC workshop
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Brussels

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Who are we

- KU Leuven
  - Department of Mechanical Engineering
    - Division of Production engineering, Machine design and Automation (PMA)
      - *__Noise and Vibration Research Group (MOD)→ Dynamics of Mecha(tro)nic Systems__*

- Research staff

  - 6 academic (Wim Desmet)
  - 1 industrial research manager (Bert Pluymers)
  - 11 postdoctoral researchers
  - 73 PhD incl. 26 industrial PhD res.

- ***DOC** Research Office and **LRD** Tech Transfer Office*

- Part of the Strategic Research Centre for Smart Manufacturing (Flanders Make) – leading *Department on Mechatronics & Design Methods*

- Active in European Automotive research
(24 FP7 & so far 7 H2020 projects – 9 as coord.)
http://www.mech.kuleuven.be/en/research/mod/Projects

# What is Science2Society ?

Beneficiaries

External Advisory Board: Toyota, Siemens, CA Technologies, International Association of Science Parks, European University Association, EUA, Big Data Value Association *(composition March 1st, 2017)*

S2S in a nutshell
… boosting innovation efficiency across Europe

7 formats „OI applied"

- Co-Creation
- Co-Location
- Collaborative R&D Projects
- Intersectoral Staff Mobility
- Big Research Data Transfer
- University Knowledge Transfer
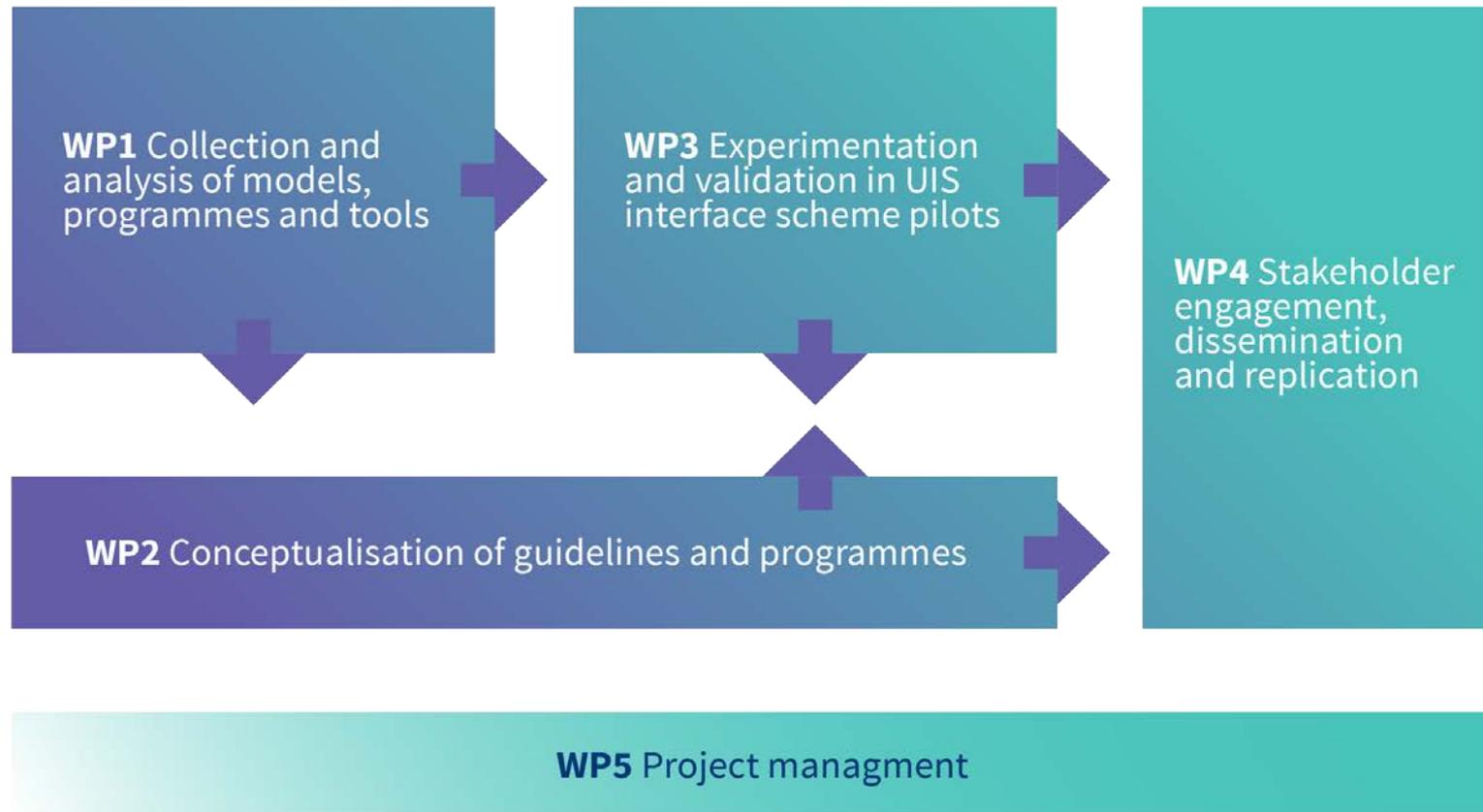- Open Innovation Marketplace
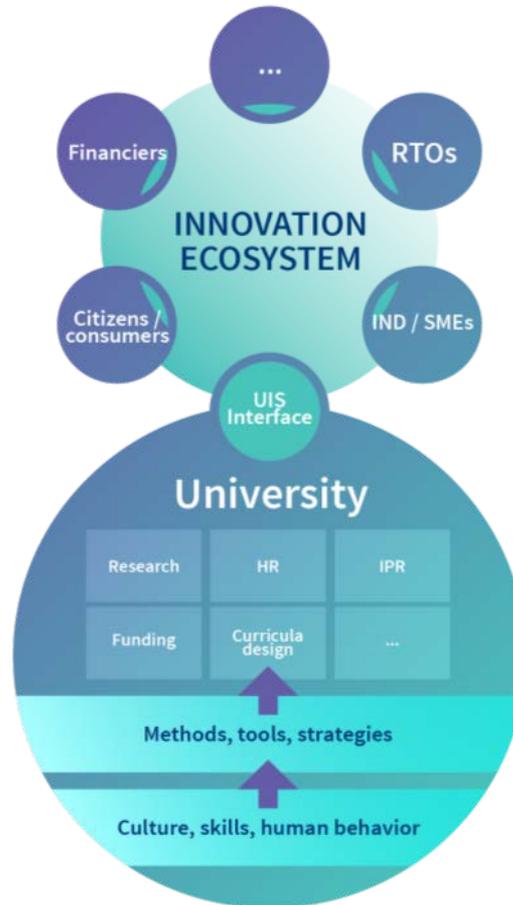
Consume

Contribute

Be part of it

Start: March 2016 (36 months)

Beneficiaries: 18 (7 countries)

Budget: € 2.85M

... Getting started

![S2S Science2Society logo]

Practical application in 7 pilot projects

1 **Co-Creation**

How can products be developed in a Virtual Idea Laboratory together with future users ?

2 **Co-Location**

How to establish industry innovation labs within universities?

3 **Collaborative R&D Projects**

How to set-up, facilitate and reward cross-organisational research teams?

4 **Intersectoral Staff Mobility**

How can intersectoral staff mobility be established between universities, RTOs and other companies?

5 **Big Research Data Transfer**

How to motivate researchers to share their data and industry to take advantage out of it?

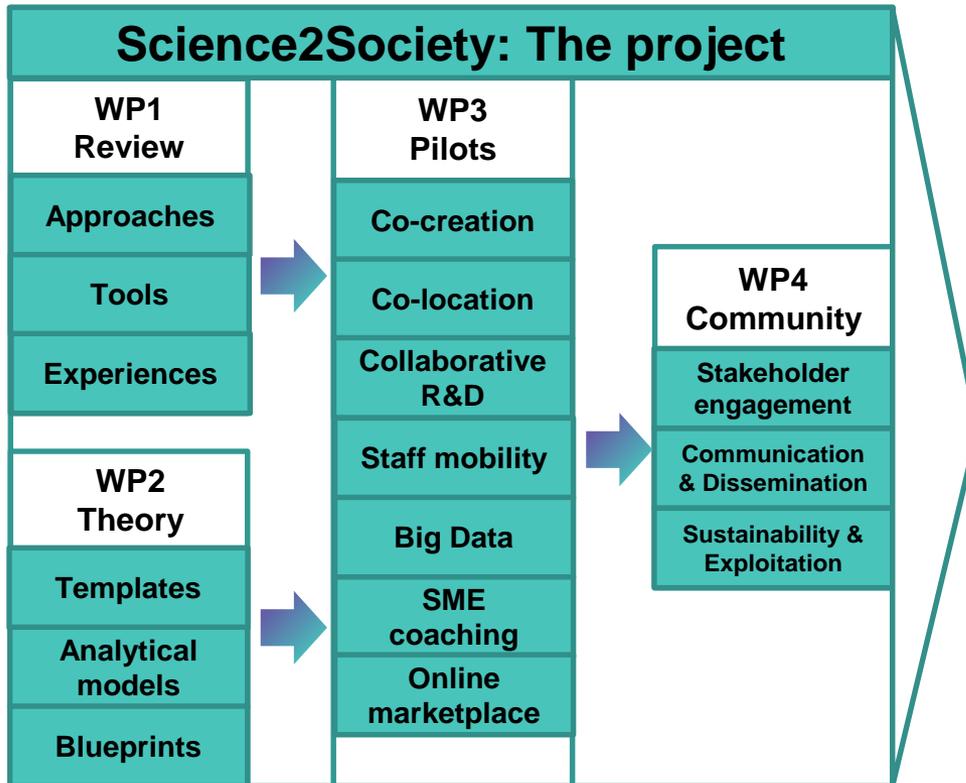**6** **University Knowledge Transfer**

What is necessary to improve 1-to-1 knowledge transfer from academia to SMEs?

7 **Open Innovation Marketplace**

How to connect universities, RTOs, industries, SMEs and start-ups with online knowledge marketplaces.

S2S Project will transform into a Learning and Implementation Alliance

Science2Society: The project

WP1 Review	WP3 Pilots	WP4 Community
Approaches	Co-creation	Stakeholder engagement
Tools	Co-location	Communication & Dissemination
Experiences	Collaborative R&D	Sustainability & Exploitation
	Staff mobility	
WP2 Theory	Big Data	
Templates	SME coaching	
Analytical models	Online marketplace	
Blueprints		

Learning and Implementation Alliance

Sharing Experiences

Engaging in a Community

Learning from Best Practices

Conducting better OI projects

www.science2society.eu

How does a stakeholder interaction look like?

Consume	Contribute	Be part of it

Stakeholder can consume first-hand information on our website and via our newsletter
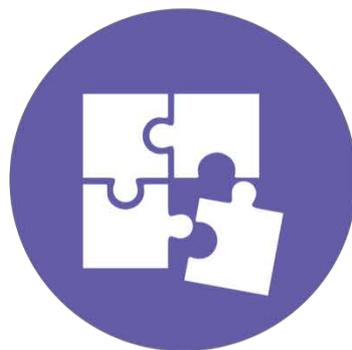
Stakeholder can use and contribute to the project's knowledge database with
- Case studies
- Their experience
- Interviews

Stakeholders can contribute to one of our 7 pilots and get deeply involved in European research networks

S2S Science 2 Society

1. **Subscribe to our newsletter** to stay tuned for news and events:
   http://science2society.eu/content/mailing-list

2. **Learn** the different Open Innovation tools and case studies:
   http://science2society.eu/main-knowledge-database

3. **Participate** in S2S workshops and events:
   Contact Thilo Bein thilo.bein @lbf.fraunhofer.de

4. **Contribute** with your knowledge:
   Contact Benjamin Walter benjamin.walter @kit.edu

- How does open innovation works in practical terms (administrative, legal and financial aspects)? How much can we operate under the "open innovation" concept while at the same time making sure of the IPR protection?
  - OI does not conflict with IP protection and making business

- European Commission through H2020 is supporting Open Innovation quite extensively. Many of the call texts are aligned with OI principles such as quadruple helix, user driven innovation, experimentation, co-creation, PCP in to the extent that it is clear that the European Commission literally wants to fund creation of OI ecosystems. However, it is still lacking in efficient interaction between projects and actors within and as many say, lacking in its impact. What could be done better or more (within the framework of H2020 instrument) to make OI embedded in the European innovation system?
  - Fully acknowledge this; S2S tries to help here in piloting 7 schemes

- Does the project deal with staff mobility issues between universities in Europe?
  - Yes, although the focus is on inter-sectorial

- From the outcomes you assessed throughout your project, which mechanisms are the ones you would appoint as landmarks to create value based on the Open Innovation paradigm?
  - To be seen (we are only just half-way) + Learning and Implementation Alliance

- What are OI-objectives? Why OI?
  - OI may help too boost creativity and effectiveness/efficiency

- How can I address OI with my proposal, when is it needed?
  - ?

- What is Open Innovation? (What is Innovation) -> Working definition: Moedas 3 O's principle; Open innovation examples (Wikinomics/Don Tapscott); OI and social innovation
  - See OI definition → Henry Chesbrough, Open Innovation: The New Imperative for Creating and Profiting from Technology, 2003, and also Center for Open Innovation, Berkeley University.

- Ideas and methodologies related to OI: What is the Quadruple Helix of OI? How does it word? How can I engage the community to participate in OI? Incentives? Money?
  - Government, industry, academia and civil participants work together to co-create the future and drive structural changes far beyond the scope of what any one organization or person could do alone.

- How can I be ambitious with Open Innovation? What is state of the art? What goes beyond? Examples of finished and running projects in OI.
  - Literature search in this field → S2S Knowledge Database

  - Are there examples of expected impact related to OI, how can I address this?
  - Communication and Open Innovation? How does this relate? What to write here? Open Innovation and IPR: Who owns the ideas coming from the community? How can I acquire people for OI activities from outside.
  - Work package structure and OI: How do I implement OI in the work packages? Timing? OI deliverables; OI tasks
  - OI and Management structure and procedures? Is there something special? Risks related to OI (people cannot be motivated to engage); milestones of OI, how does this relate to the overall milestones. OI project bodies and infrastructure
  - How can I extend the consortium with the Open Innovation community? Complementary expertise, synergies?
  - How can I foresee resources/money for OI (PMs, incentives, honoraries, open call according to Annex K of the H2020 WP)
  - What is the OI community? Ho to I address it in section 4? (4.2 Third parties)?
  - Is there an example of a (successful) proposal with a strong OI cross-cutting aspect? best practices

- I guess the greatest issue to discuss is IP related - how do you get all players to an open exchange of data / knowledge while at the same time securing the know-how of an organization (for most institutions this is the core of their business model) / does open innovation ultimately impact the legal structures and framework of an institution?
  - Keyword: transparency & trust

- When implementing mobility actions: where should the costs be allocated (in which category) and through which mechanism are they best transferred to anyone embarking on mobility missions (if mobility missions are not directly fixed for each partner but offered via tenders). How may partners outside the consortia be included in mobility missions (financially / legally)?
  - Depends on the funding scheme

- Others…

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