
Policy and Evaluation Challenges in Public to Public (P2P) Cross-border Partnerships

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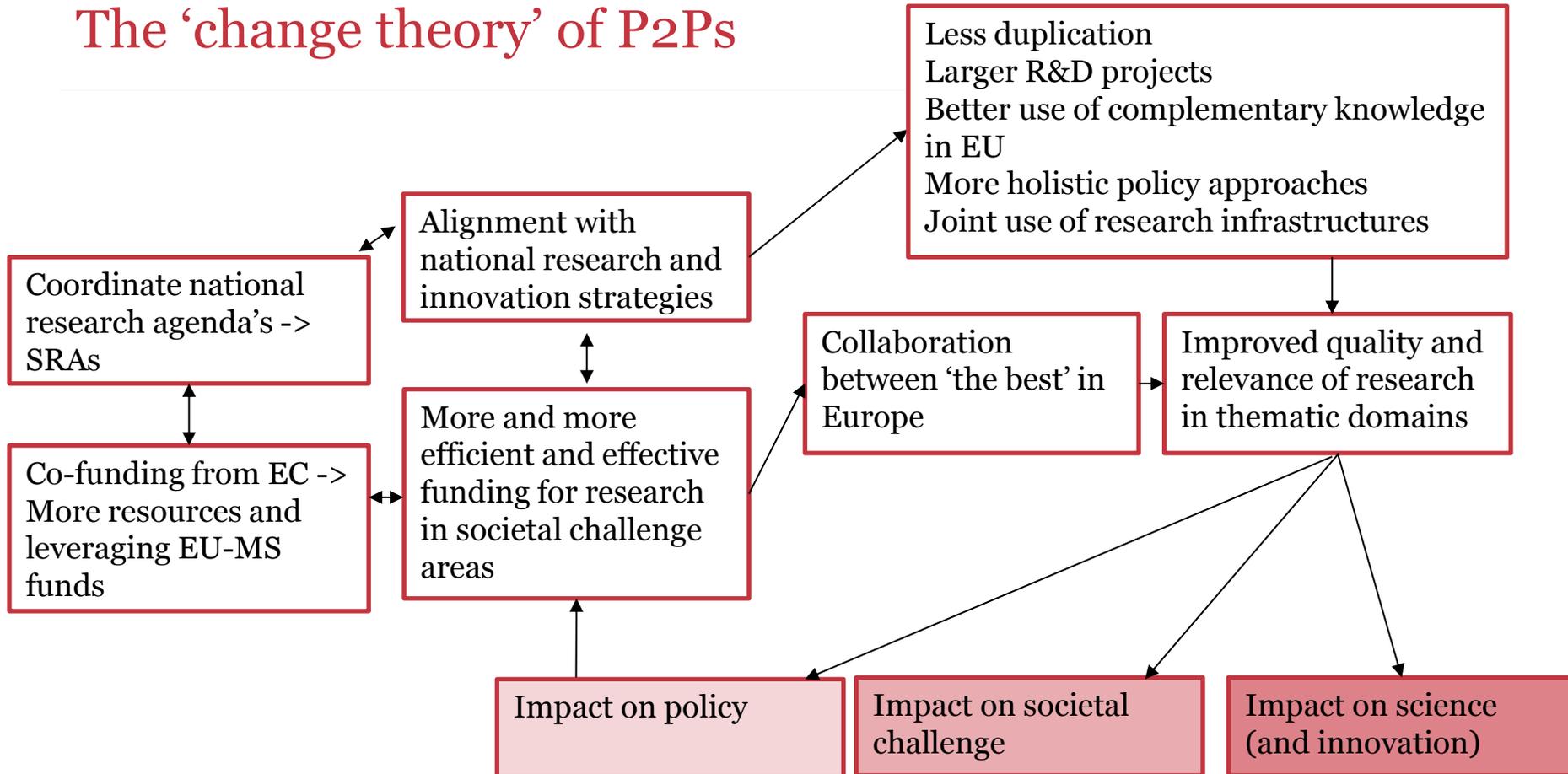
The key topics that this presentation addresses

- Understanding the rationale of Public-to-Public Partnerships (P2Ps) in the bigger ERA context
- Evaluation of Research and Innovation policies has many challenges and the P2P mechanism adds to that complexity
- What types of impact do we expect?
- The state-of-play of P2P evaluation
- The future of P2Ps and their evaluation

The original rationale for P2Ps

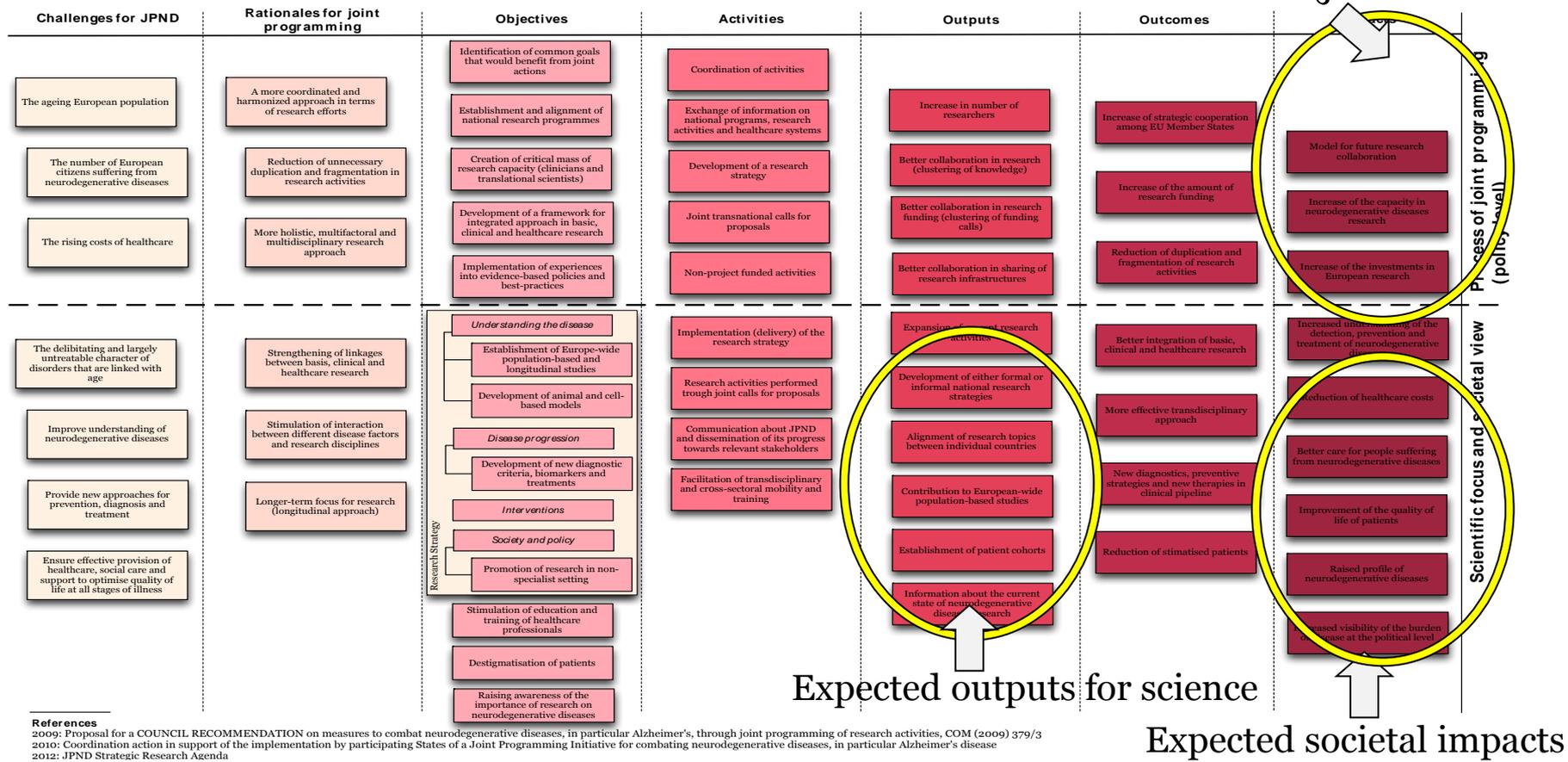
- ERA Green Paper ‘New Perspectives’ 2007:
 - *Well-coordinated research programmes and priorities, including a significant volume of jointly-programmed public research investment at European level involving common priorities, coordinated implementation and joint evaluation;*
 - *Jointly identifying major societal challenges beyond national capacity*
- Change in the governance pattern of European research policy
 - *Creating a bigger leverage with EU funding*
 - *Closer involvement of national research funders*
- Aligning research funding strategies across borders (SRAs)
- Bigger critical mass in research programmes (reducing fragmentation)
 - *More high quality research as a result?*

The 'change theory' of P2Ps



Expected policy impacts

Example of LFA: JPI on Neurodegenerative Diseases



References
 2009: Proposal for a COUNCIL RECOMMENDATION on measures to combat neurodegenerative diseases, in particular Alzheimer's, through joint programming of research activities, COM (2009) 379/3
 2010: Coordination action in support of the implementation by participating States of a Joint Programming Initiative for combating neurodegenerative diseases, in particular Alzheimer's disease
 2012: JPND Strategic Research Agenda

P2Ps add new complexity to impact assessment

- Expected European Added Value of aligning policy agendas and pooling resources -> what does this mean in practice and how do we measure this?
 - *Defining specifically what the objectives are at different 'beneficiary levels'*
- Not only do we expect the 'traditional' science, technology and innovation impacts, the P2Ps address a response to societal challenges -> adds a long-term dimension of evaluation complexity
- In terms of the 'efficiency' question: can we be sure that the additional transaction costs of P2Ps outweigh the benefits of the trans-national partnership model?

Attributing P2Ps to environmental impact is tough

FIGURE 20 - EXAMPLES OF INDICATORS THAT CAN BE USED IN RTDI-FOCUSED SUSTAINABLE ENERGY PROGRAMMES ▼

| RESOURCE INDICATORS | OUTPUT INDICATORS | RESULT INDICATORS |
|---|--|--|
| <p>€ allocated for R&I</p> <p>Human effort invested (days)</p> <p>Subsidy (in €) for each kWh of renewable energy</p> <p>Training courses (days/€)</p> <p>Organisational or regulatory means introduced</p> | <p>No. of patents in RES and EE filed</p> <p>No. of publications on RES and EE topics submitted to journals</p> <p>No. of households with improved energy efficient properties</p> <p>No. of SMEs received advice/training in energy management</p> <p>No. of cars/buses running on biogas</p> | <p>ENVIRONMENTAL</p> <p>CO₂, SO₂ reduced</p> <p>Air quality improved</p> |
| | | <p>(ECO-)INNOVATION</p> <p>Application of patents in products and processes</p> <p>Popularity (sales) of the new product on the local market</p> <p>Spin-offs based on the energy R&D project or initiative</p> |
| | | <p>ECONOMIC</p> <p>Increase in energy efficiency savings in € %</p> <p>Profit from sustainable energy projects in €</p> <p>No. of carbon credits generated</p> <p>Increase in turnover revenues and return on investment in €</p> |
| | | <p>SOCIAL</p> <p>No. of jobs created</p> <p>Improved mobility possibilities</p> <p>Improved quality of energy services</p> <p>No. of new businesses created</p> |

Source: Doronova et.al.,2012, Connecting Smart and Sustainable Growth through Smart Specialisation

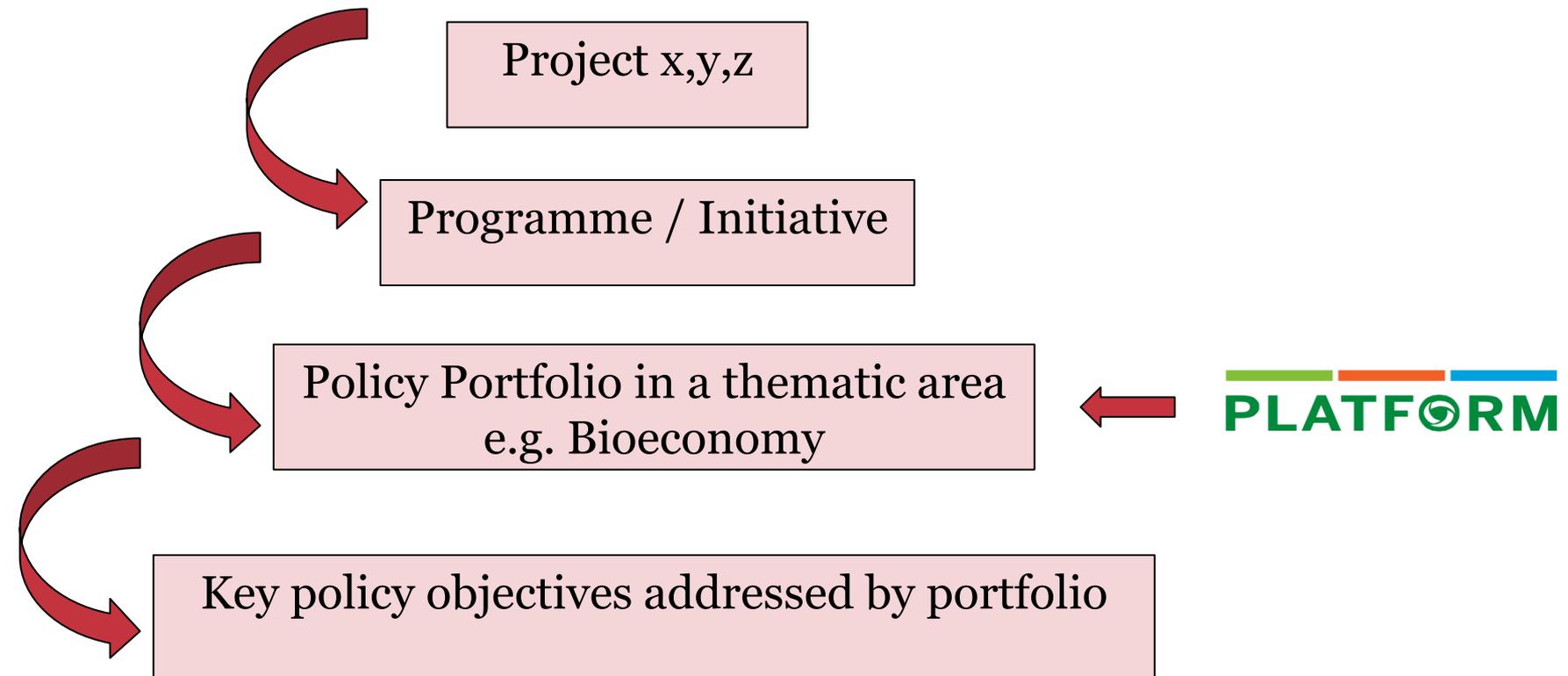
Bottlenecks for monitoring and evaluation of P2Ps (1)

- Research Programming by a Collective -> broad focus, fuzzy objectives
- Measuring the impacts beyond the scientific outputs and impacts
- The Societal Challenge objectives -> measurable indicators
- Defining Pathways to Impact -> relying on the qualitative narrative
- Key Performance Indicators not set collectively at EU level
- Could the results have been achieved by a series of national programmes or bilateral agreements? -> the European added value of P2Ps

Bottlenecks for monitoring and evaluation of P2Ps (2)

- Data on P2P participation in each Member State is not collected centrally
 - *Response in MS: better mapping of which stakeholders take part in P2Ps*
- Data on how P2Ps have changed national research programming is also a black box
 - *Mostly anecdotal evidence*
 - *Needs big data collection in multitude of national programmes*
 - *Difficulty to take into account (impact on) institutional funding*

We tend to focus our assessments at the project level



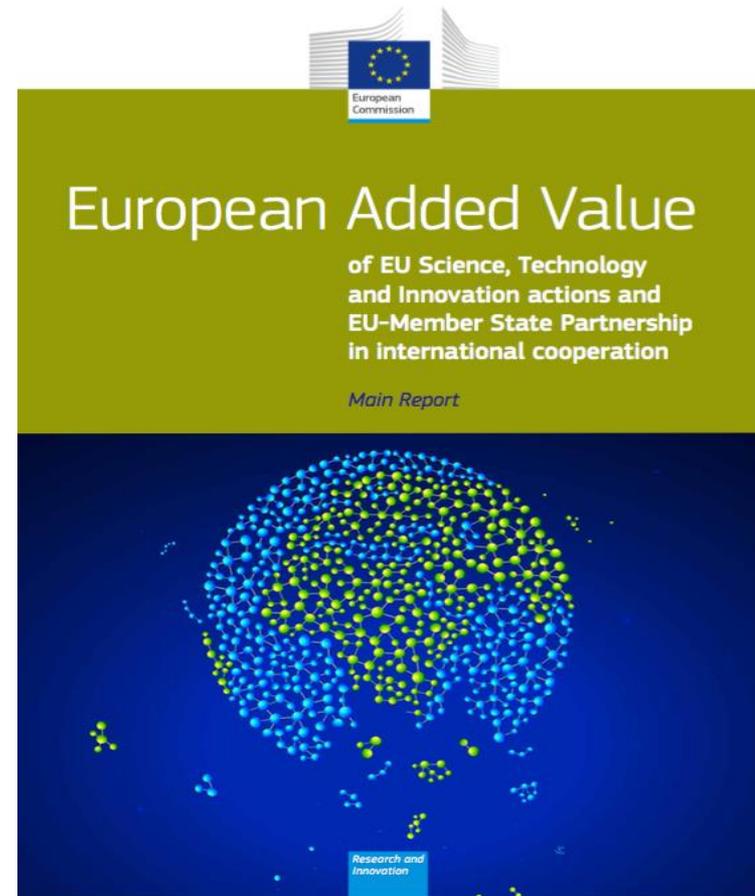
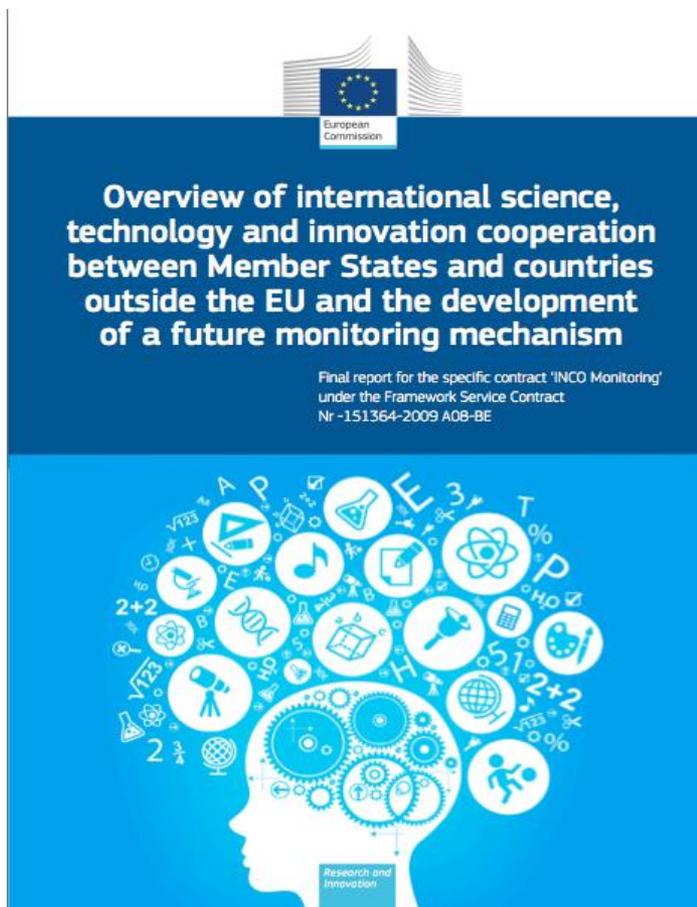
Study on long term impact FPs: impact mechanisms that are less visible in a short term perspective ... (1)

| Long-term impacts | QIPC | Brain Research | O ₃ | Solar PV | Auto-motive | Manu-future |
|---|------|----------------|----------------|----------|-------------|-------------|
| Discovery | X | X | X | X | | |
| Creating new knowledge outputs, more generally, especially moving towards applications | X | X | X | X | X | |
| Discipline development | X | | | | | |
| Focusing device in relation to innovation | | | | X | X | X |
| Agenda-setting | X | X | X | X | X | X |
| Promoting self-organisation of stakeholder communities | X | X | X | X | X | X |
| Influencing regulations or standards | X | | X | X | X | |
| Coordinating or influencing policy | | X | X | X | X | X |
| Strengthening networks, Knowledge Value Collectives; defragmenting the research community | X | | X | X | X | X |

Study on long term impact FPs: impact mechanisms that are less visible in a short term perspective ... (2)

| Long-term impacts | QIPC | Brain Research | O ₃ | Solar PV | Auto-motive | Manu-future |
|--|------|----------------|----------------|----------|-------------|-------------|
| Changing research network shapes: putting Europe in the centre | X | X | X | X | N.A. | N.A. |
| Levering funding for R&D | X | X | X | | | X |
| Mobility and development of human capital | X | X | X | X | X | |
| Research infrastructure (Grids, test-beds, etc) | | | | | | |
| Behavioural additionality: learning a 'new' innovation model | | X | | | X | X |
| Speeding up industry' entry into new technologies | X | | | | | |
| Tackling problems too big for an individual Member State | X | X | X | | | X |
| Addressing areas of major socio-economic importance for the EU | X | X | X | X | X | X |

DG RTD studies on International Cooperation



See: <http://ec.europa.eu/research/iscp/index.cfm?pg=studies>

Some findings from these studies

- International STI cooperation beneficial from a scientific point of view:
 - *If any monitoring exists: internationally co-authored publications, international mobility of scientists*
- Little consideration for the impacts on national policy making or policy objectives beyond the scientific benefits
- Hardly any conceptual frameworks on how these International STI co-operations impact societal challenges or innovation
- Hardly any Member State monitored or evaluated these cross border programmes in 2009
 - Recent Mutual Learning Exercise on P2Ps confirms this picture

The concept of European Added Value (EAV) has evolved

| Dimensions of European Added Value | FP1 | FP2 | FP3 | FP4 | FP5 | FP6 | FP7 |
|---|-----|-----|-----|-----|-----|-----|-----|
| | 84 | 87 | 90 | 94 | 98 | 02 | 07 |
| | - | - | - | - | - | - | - |
| | 88 | 91 | 94 | 98 | 02 | 06 | 13 |
| Scale too big for Member States to handle alone | | | | | | | |
| Financial benefits: a joint approach would be advantageous | | | | | | | |
| Combines complementary MS efforts to tackle European problems | | | | | | | |
| Cohesion of European markets | | | | | | | |
| Unification of European S&T across borders | | | | | | | |
| Promotes uniform laws and standards | | | | | | | |
| Mobilising EU potential at European and global level by coordinating national and EU programmes | | | | | | | |
| Contributes to implementing EU policy | | | | | | | |
| Contributes to societal objectives (later 'grand challenges') | | | | | | | |
| Exploits opportunities for the development of European science, technology and industry | | | | | | | |
| Structures the EU R&D community and 'fabric' | | | | | | | |
| Improves quality through exposure to EU-wide competition | | | | | | | |

- .. but do we evaluate how P2Ps have benefited from this EAV?

Policy Support Facility – Mutual Learning Exercise P2Ps

- Topic is National Alignment with European P2Ps
- 11 countries taking part in this MLE
- National Governance Structures major influence on impacts:
 - *Governance Structures have strong influence on ‘alignment’*
 - *Lack of national processes to prioritise which P2P to join*
 - *Inter-Ministerial, Ministry-Agency and Agency-Agency coordination big challenge*
 - *Lack of human resources to be actively involved in the governance bodies of relevant P2Ps*
 - *In all MLE countries: monitoring and evaluation is underdeveloped*
- Involvement of stakeholders and mapping participants is a first big step in understanding the effects of P2Ps on the community

State-of-Play in P2P evaluation

- Individual P2Ps have started to be evaluated – but small numbers
 - *Mostly focused on outputs*
- Evaluations at instrument level
 - *Analysis of ERA-NET Co-fund under H2020 (2016)*
 - Clearest result is better cooperation between national agencies
 - *Evaluation of Joint Programming to Address Grand Societal Challenges (2016)*
 - Concerns about the leverage of JPIs
- ERA-Learn Platform is developing manuals and conceptual frameworks for evaluating P2Ps

P2Ps and evaluation in the future

- The complex and time consuming **governance** of all P2Ps and PPPs needs rethinking
- More attention to the added value of joining a P2P and developing national decision frameworks for **prioritisation**
- More joined up governance within MS allowing a more coherent framework of **policy objectives** of P2Ps
 - *E.g. collaboration between Ministries of Research, Environment, and Agriculture*
- Still a lot of work to be done to make better estimations of P2P **transaction costs** -> human resources bottleneck
- Better **mapping and data collection** at project and participants level as a necessary first step

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