Public Procurement, Innovation, and Entrepreneurship: two sides of the same coin

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Outline

1. PPI as a Mission-oriented Innovation Policy
   - Examples of PPI

2. What is meant by PCP?
   - Examples of PCP

3. Public Proc. for Innovation and Entrepreneurship?

4. Conclusions and discussion
1.- PPI as a Mission-oriented policy

- The main rationale for PPI is:
  - To satisfy human needs,
  - To solve societal problems, and/or
  - To meet agency/mission-needs.

- Relevance of PP not only for stimulating the development of innovative activities but also for addressing "grand challenges".
1.- PPI as a Mission-oriented policy

- In the EU15, more than 16% of GDP is used for Public Procurement.

- Vast majority represents regular public procurement.

- Examples of PP in stimulating innovation.
  - Declare innovation as the explicit and intentional goal of the initiative - intended PPI –
  - Examples where innovation is emerging as an important criteria - emerging PPI -
    - Innovation was not the objective of the procurement process.
    - Innovation turns out to be a by product of the public procurement process
1.- PPI as a Mission-oriented policy

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<tr>
<th>Character of the Procurement Process</th>
<th>Adaptive Procurement</th>
<th>Developmental Procurement</th>
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<tbody>
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<td><strong>User</strong></td>
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<td>Direct Procurement</td>
<td>X2000 (Case 1)</td>
<td>AXE Telephone Switch (Case 2)</td>
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<td>NødNett Norge (Case 5)</td>
<td>ADS-B (Case 6)</td>
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<td>Catalytic Procurement</td>
<td>Light corridors (Case 3)</td>
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<td>Swedish refrigerator (Case 4)</td>
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1.- PPI as a Mission-oriented policy

- Lessons learnt:
- Functional vs. Technical specifications
  - “Translating” the needs/problems/challenges into functional requirements requires high competence on the procuring organization.
  - Functional specifications should describe the desired performance characteristics of the product the procurer is ready to buy.
  - For the procurer it is irrelevant how the product mitigates the challenge; that must be left to the potential suppliers.
  - Too detailed specifications (set by the procuring agency) limit the ability and creativity of potential suppliers to provide innovative solutions to the challenge (e.g. X2000, NødNett)
1.- PPI as a Mission-oriented policy

- Lessons learnt:
  - Interactive learning and cooperation
    - Successful cases are those where strong cooperation exists between procurer (user) and supplier (producer) (e.g. light corridor, Swedish refrigerator, AXE switch).
    - Cooperation does not guarantee success, competence is required on both sides (e.g. X2000).
    - E.g. the “industry days” promoted by public agencies in the US.
1.- PPI as a Mission-oriented policy

- Lessons learnt:
  - Policy-mix
    - PPI is a powerful demand-side innovation policy instrument to meet grand challenges, but…
    - … grand challenges can also be mitigated through means other than PPI.
    - Policy-mix: use PPI in combination with other innovation policy instruments, including supply-side ones.
    - E.g. public funding of R&D, tax incentives, development/modification of regulations and norms, standard setting, awards, innovation vouchers, etc.
2.- What is meant by PCP?

- PCP concerns the R&D phase before commercialization.
  - In PCP, the public purchaser does not reserve the R&D results exclusively for its own use.
  - The supplier owns the IPR or shares them (after negotiation) with the corresponding public agency.
  - The private supplier shares the risk of the R&D and the public authority will not be required to purchase the good, service or system resulting from the R&D.
2.- What is meant by PCP?

- The purpose of PCP policies is to foster the development of new ‘yet-to-be-designed’ technology research.
  - To develop new R&D-based knowledge which may later lead to innovative solutions (or products), but…
  - …the development of new products is not part of the PCP as such.
2.- What is meant by PCP?

In general, PCP practices are managed in three steps:

1. Solution exploration phase (~ 6 months): where a number of offers from competing suppliers are selected.
2. Prototyping phase (~ 2 years): where the chosen suppliers develop their own models in parallel.
3. Testing phase (~ 2 years): where at least two suppliers remain to ensure a future competitive market and the solutions are validated through field tests.
2.- What is meant by PCP?
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<td>DigiDijk (Case 1)</td>
<td>Market Validation</td>
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2. - What is meant by PCP?

- Lessons learnt
- PCP is very often mixed up with PPI
  - In PCP, unlike PPI, public agencies do not describe specific requirements
  - In PCP, there is no actual product development, and no buyer of such a product is involved.
  - PCP is a supply-side innovation policy instrument, since the responsibility for a possible commercialization lies on the shoulders of the company.
  - PPI and PCP may supplement each other as parts of a policy-mix, but they should not be mixed up.
2.- What is meant by PCP?

Potential challenges of PCP

- One of the potential risks of PCP is its degree of uncertainty.
- Probability of having only one single supplier from the beginning of the process, which may hamper the chances for competition.
- Regulations: cooperation and dialogue are important ingredients for the success of PCP and PPI, so they should not be prohibited.
- Protectionism vs. grand challenge mitigation
3.- PP for Innovation and E´ship?

- Aim: Conceptualize the PPI process so it provides more room for the creation of new organizational forms.

- In what sense can the organization of the PPI support and stimulate entrepreneurship?
  - Double causality
    - The establishment of new organizational form can create innovation
    - Demand for innovation can stimulate the establishment of new organizational forms
3.- PP for Innovation and Entrepreneurship?

- Organizing PPI to stimulate Entrepreneurship
  - Coordinated unbundling of the PPI process.
    - Horizontal unbundling (divide the PPI process into independent – but still related - stages)
      - Involve more than one agency (cross-disciplinarity)
    - Vertical unbundling (same unit does not have to develop all the steps in the innovation process).
      - Idea generation – exploration - (tournament-based) and idea implementation – exploitation -.
    - Ability to mobilize smaller organizations.
      - Wider scope of innovative ideas
      - Increase competition pressures with large firms
3.- PP for Innovation and E´ship?

- Organizing PPI to stimulate Entrepreneurship
4.- Conclusions and discussion

- Challenges

- Competence building among public servants in the requirement setting process: constrain
  - Professionalization of public procurers plays a growing role within political strategies.
  - Selecting the appropriate stakeholders to take place in the focus groups.

“With a good education you can grow up to be anything I want you to be.”
Challenges

- Dealing with intellectual property rights
  - Who receives ownership of the product. How is this arranged in the vertical unbundling approach where idea and implementation can take place in more than one firm.

- Providing monetary incentives
  - Setting the prize for which the public actor will buy the product or service. Identifying ex-ante prizing.
  - Providing a market that is large enough for firms to participate in the bid and remain in the procurement process.

- Setting the overall policy mix
  - Requires a mixture of various demand and supply based policy measures to reach the desired outcome.