Public Procurement of Innovation:

ADOPTION & INITIATIVES & MEASUREMENT IN SPAIN

Luis Miralles de Imperial
Deputy Directorate General for the Promotion of Innovation
SECRETARIAT GENERAL FOR SCIENCE AND INNOVATION
Luis.miralles@mineco.es

MLE VIENNA - SEPTEMBER 21st, 2017
I. OBJECTIVES AND DEFINITIONS

Aims:

- **Public Procurement of Innovation (PPI)**/ Compra Pública de Tecnología Innovadora (CPTI):
  - Public procurer – Launch customer. Closer to the market than PCP
  - Objective: procure/deploy innovative good & services not commercially available.

- **Precommercial Public Procurement (CPP)**/ Compra Pública Precomercial (CPP):
  - Public procurer share risks and benefits jointly with suppliers in market-conditions
  - Objective: R&D services*** linked to the needs of public services.

(*) EC; “CORDIS: FP7: ICT: ICT:PCP”
(**) E.C.; “Paper of the Services of DG Competition containing a draft framework for state aid for R&D\&i”
(***) Comprendido en categorías de I+D del marco comunitario de ayudas a la I+D+i. Excluyendo productos terminados salvo prototipos.
II. RATIONALES

- Contribution to annual GNP [Order of Magnitude 10% - 20% (OCDE, EU/EUROSTAT...)]

  i.e: (ES) Δ +3% investing effort at AGE’s* level in PPI, amounts up to Δ + 7.5% a 10% in R+D+i [x2]

- Econometric estimations for Demand Side Measures’ Impacts (PPI...):

  - PPI – Private Investment on R&D**:
    - Augmented private effort on R&D by contractors: [Correlation +]
  
  - Public Investment on R&D – Forward & backwards Linkages ***:
    - Increased likelihood of private R&D investment: [x2]
    - Demand side (forward linkages) – offer side (backwards linkages): [x10]

(*) AGE: Administración General del Estado – Spanish National Administration

(**) OCDE-2014. Cobb-Douglas modelling for private R&D effort

(****) Universidad de Valencia 2008-2009; Serrano Domínguez et al.
III. INSTRUMENTATION

- GOVERNANCE – NETWORK OF CONCERTED COMPETENCE CENTERS

  Leadership: SGCI (Secretariat General for science and Innovation)
  - SGFI (Deputy Directorate General for the Promotion of Innovation):
    - Legal and financial structuring
    - ESIF Management for innovation procurement
    - Needs identification, Overall Coordination, Impulse and Assessment
  - CDTI (Center for Industrial and Technological development):
    - H2020 NCP for innovation procurement
    - Synchronization of supply side measures
  - SGCI's Concerted Competence Centers (Identification and Evaluation of Public services Needs)
    - Ministry for Health, social Security and Equality (Health and Social Services)
    - Instituto de Salud Carlos Tercero (ISCIII) (Health and Social Services)
    - Instituto Nacional de Técnica Aerospacial (INTA) (Dual technologies)

- FUNDING – Set aside of ESIF Budget Allocation
### III. INSTRUMENTATION

<table>
<thead>
<tr>
<th>Topic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guide for Public Procurement of Innovation 2.0(^1)</td>
<td>December 2015 (v\ 1.0\ NOV\2011)</td>
</tr>
<tr>
<td>SUPPORT DESKTOPS</td>
<td>AGE (MINECO; MSSSI; CDTI) CC.AA. (GAIN; AQuAS)</td>
</tr>
<tr>
<td>PPI AWARD</td>
<td>Since 2012</td>
</tr>
<tr>
<td>FID Programme (INNOCOMPRA)</td>
<td>FEDER 2014-2020</td>
</tr>
<tr>
<td>H2020 Programme</td>
<td>Since 2014</td>
</tr>
<tr>
<td>INNODEMANDA Programme (Synchronization)</td>
<td>Since 2012</td>
</tr>
</tbody>
</table>

\(^1\) Produced in close cooperation with the Observatory for Public Procurement (OBCP) from the University de Zaragoza (UNIZAR)
IV. ADOPTION

1st & 2nd Generation - Period 2011-2015 + 3rd Generation:

OPERATIONS 1st Y 2nd GENERATION [2011-15]:

- 21 Operations (229,49 M€)
  - Achievements: 85% aprox.
  - Budget Certification: 80% aprox.

OPERATIONS 3rd GENERATION [2016-2020]:

- 4 Operations (aprox. 47 M€)
- 8 Approved Operations (aprox. 60 M€)
IV. ADOPTION

CASE-STUDY: FID SALUD

- **SECTOR:** HEALTH. National Portfolio of Health Services
- **FOCUS:** Personalized Medicine, Advanced Diagnosis, Automation, Robotics...
- **BUYER:**
  - REGIONAL HEALTH SERVICES (18)
  - MINISTRY OF HEALTH AND SOCIAL SERVICES (COORDINATION)
  - INSTITUTO DE SALUD CARLOS III (EVALUATION)
- **ROUNDS:** ONCE PER YEAR (Aprox. 15 projects; Aprox. 60 M€ R&D)
- **CURRENT ROUND:** 2nd
V. LESSONS LEARNT / CONSIDERATIONS

**BEFORE LAUNCHING THE OPERATION**

- Run a meaningful **Cost Benefit Analysis** (CBA). Comprising:
  - Clear **identification of public service** to be improved
  - Clear identification of potential **scalability** and procurer commitment
  - Clear identification of **authentic needs** (based on **Key Indicators**) avoiding solution lock-in.
- **Smart investor** (consider **capacities of local supply chain** before prioritising investments)

**DURING THE OPERATION**

- Need of **integrated multidisciplinary teams** (controllers, managers, procurers, legal advisors...)
  - Joint effort (coordination required)
  - **Early involvement** (since the beginning).
- Close **follow-up** (separated accounting, quarterly reporting...)
- **Wide dissemination** (market consultation; e-procurement...)
V. LESSONS LEARNT / CONSIDERATIONS

AFTER THE OPERATION

- Public Expenditure on RD&i:
  - Approx. 20% leveraged budget (Increase)
  - Approx. 3 years for certification (Public Deficit Neutralization)

- Private Investment on R&D&I ** ***:
  - Augmented private effort on R&D by contractors: [Correlation +; Approx. 70%]
    - Requires data-set and measurement (Challenge)
    - Confined population versus overall monitoring and measurement
  - Increased likelihood of private R&D investment: [x2]

(**) OCDE-2014. Cobb-Douglas modelling for private R&D effort

(****) Universidad de Valencia 2008-2009; Serrano Domínguez et al.
VI. MEASUREMENT

MEASUREMENT OF THE PPI ACTIONS OF PUBLIC ENTITIES WITH /WITHOUT ERF FINANCING

- Programme FID - INNOCOMPRA, addressed to public procurers:
  - The strategy of setting aside budget allocation obliges, in fact, to carry a strict control and measurement for national budgetary authorities and for ERF EC authorities
  - FID is managed and measured by Secretariat General for Science and Innovation (aforementioned).
    - 2007-13: 21 operations with 229,49 M€
    - 2014-20: 12 operations with 107 M€, currently in progress. The aim is to reach 300 M€ in terms of ERF financing at the end of this period

- Programme INNODEMANDA: Managed and measured by CDTI, addressed to public bidders

- Other actions of Central Government, by different ERF intermediate organisms are managed and measured by themselves

- Other actions of Regional / Local Administrations under ERF Operative Programmes: Autonomous Communities of Galicia and Cataluña have included Innovation-related Procurement and PCP in their regional OPs, e.g. actions in water supply infrastructures of AQUAS – Generalitat de Cataluña. These kind of actions are managed and measured by themselves for ERF authorities

- Other actions of Municipalities without ERF financing, such as those of the Madrid Cyty Hall, are managed and measured by themselves, under their own budgetting control

- There is not, until now, an overall survey to measure all IP and PCP actions in Spain, that should be carried by INE, Statistics National Institute