Public Procurement of Technology Innovation and SME's

(in the framework of demand side R&I policy)

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Demand side R&I policies (1)

Goals

- To overcome market and system failures
- To provide better solutions to societal needs
- To modernize the production sustem
- To increase technological competitiveness of local firms and to create lead markets

Approach

- Inducing innovation and/or speeding up diffusion of innovation through increasing demand of innovation
- defining new functional requirement for products and services
- better articulating demand

Demand side R&I policies (2)

Tools

- Public Administration purchase of innovative products/services better responding to its needs
- Technical standards and regulation requiring better performance of products/services
- Incentives (financial, taxation, etc.) to stimolate private demand of innovative products/services
- Systemic policies, bringing users and suppliers together

Public Procurement of Technology Innovation (PPTI)

Modalities

- Strategic Procurement vs General Procurement
- State Procurement in connection with private users (Cathalitic Procurement)
- Pre-Commercial Procurement vs Commercial Procurement

Critical issues

- Lack of coordination among PA departments
- Divergence beetween PP requirements and private needs
- Public needs and suppliers' capacities not in line
- Multiple (often conflicting) goals of PA

SMEs and PPTI

Benefits expected by firms

- Large scale delivery to PA of the industrialized prototype of the new technology
- Acquisition of new technical knowledge and competence, to be exploited afterwards in markets other than PA for new products/services
- Creation of a private demand for advanced products/services

Critical issues

- Complex process for setting up functional requirements of the innovation (multiagent, resource and time consuming) (Competitive Dialogue)
- Assignment rules (regarding quality and cost of proposals) favouring large (international) companies
- No advantage given to the firm that developed the innovation prototype when bidding for the large scale delivery
- Large scale delivery requiring large manufacturing capacity and financial resources
- Ownership of IPRs of the innovative technology

SME's drawbacks

- Scarce technical, financial, organizational resources
- Highly specialized competence vs complex multisectoral innovative technologies required by PA
- Low performance in terms of image, reliability and profitability and short life vs criteria for evaluating proposals

SME's requirements for PPTI implementation

Investigation over a sample of SMEs in Italy, Portugal, Spain: main results

	Italy		Portugal		Spain	
	yes	no	yes	no	yes	no
Acquaintance with PPTI	10	90	27	63	12	88
SMEs ownership of IPRs	76	24	89	11	20	80
Bidding reserved to local firms	65	35	56	44	75	25
Minimum budget share for SMEs	72	28	89	11	69	31
Privileged access to large scale delivery	95	5	94	6	100	0

How to implement PPTI for SMEs

- Small and focused innovation projects
- Requirement in terms of functional features of the innovation to be delivered rather than R&D activites to be carried out
- A two stage process for evaluating proposals, with simple and fast procedures for stage one
- Selection criteria giving less importance to the firm capital and finanzial performance
- Direct interactions with potential end users
- Owership of IPRs restricted to the project activities only and sharing of revenues
- Some relationship beetween developing the prototype of the innovation and the full scale delivery