



Lessons learnt and tips for planning innovation procurement

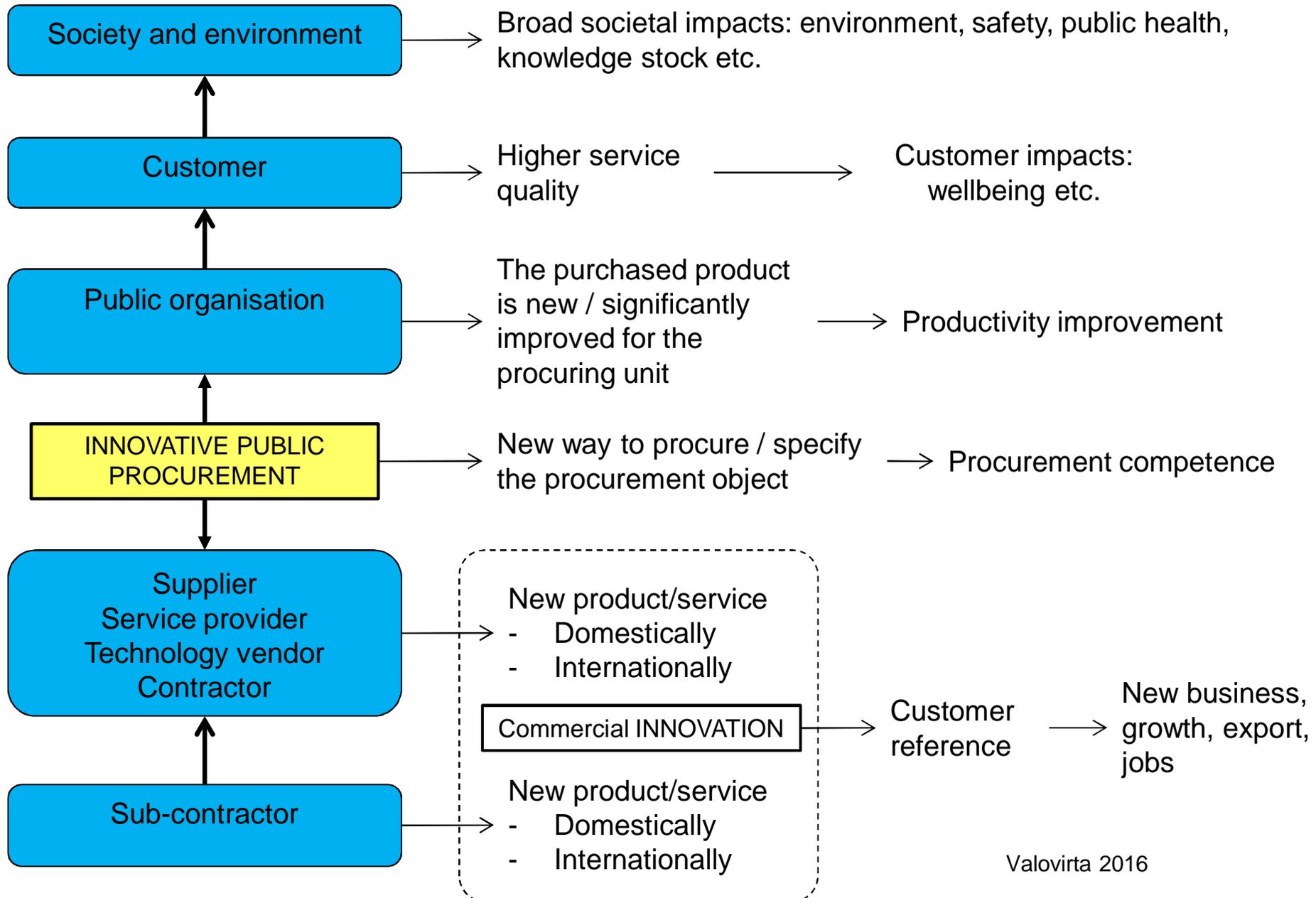
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Impacts of public procurement for innovation



Societal challenges and unmet public sector needs

- **Unmet needs** – Public sector has needs which are currently not met by available supply from the marketplace.
- **Triggers and drivers:**
 - Operative problems
 - Upcoming investments
 - New policy targets
 - Upcoming regulatory changes
 - Socio-economic and environmental challenges ('grand challenges')

Market dialogue with suppliers

Public procurers

- May communicate their needs to potential suppliers
- Collect information about available innovative products
- Improve procurement specifications
- Identify potential targets for innovative procurement



Better services, improved productivity and effectiveness



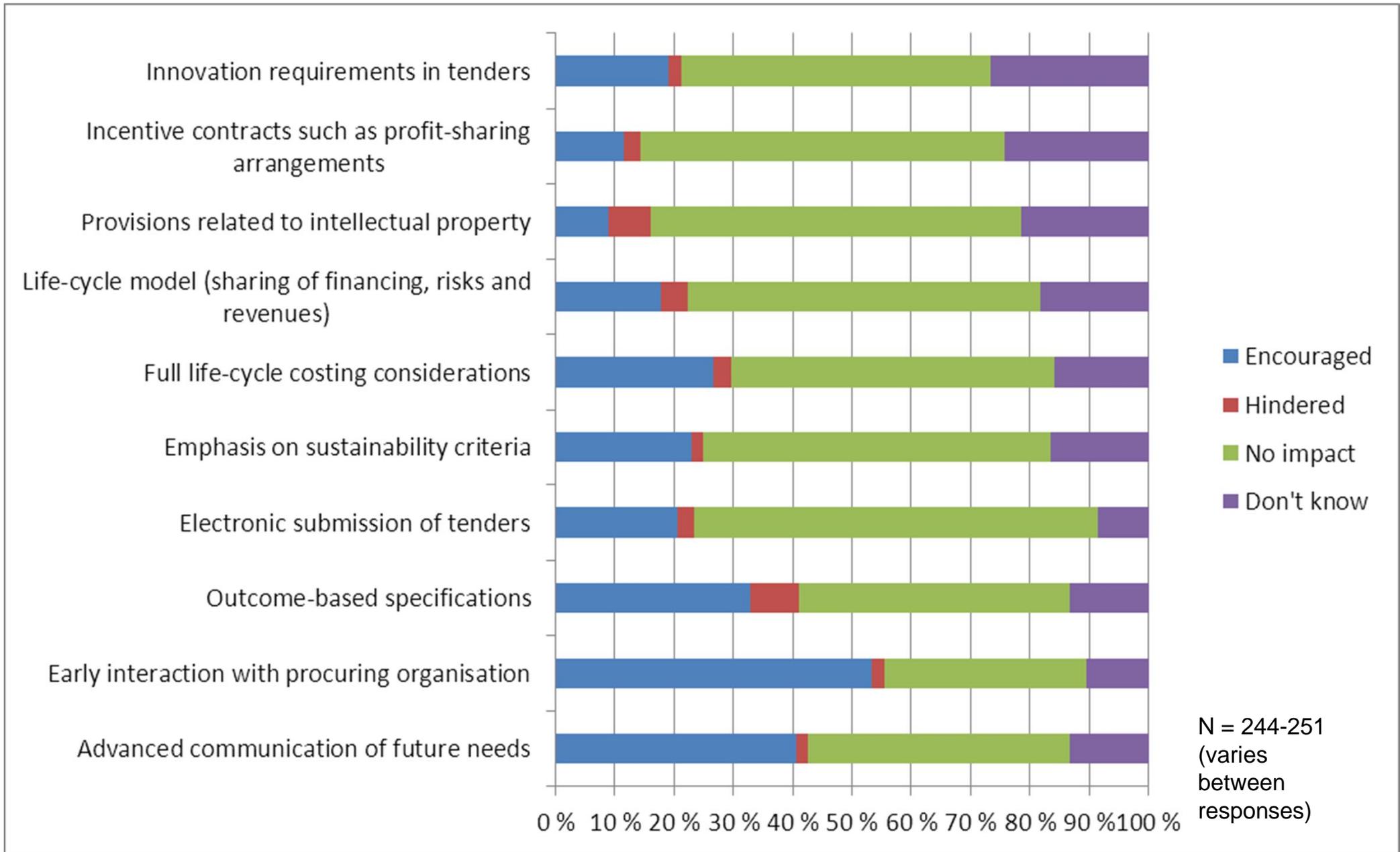
Suppliers

- Get informed at early stage about upcoming public procurements
- May convey information to buyers about their innovative solutions
- Can initiate product development meeting public sector needs.



Demand for new products, new business opportunities

Impact of procurement practises on innovation



Source: VTT survey to supplier firms, 2013

Select appropriate procurement approach according to market readiness

Market readiness

1. There are products on the marketplace to meet the procurer's needs. Reference deployments are available. (Might be new to the procurer, not to market.)



- Conventional procurement

2. There are new solution(s) available but they lack first deployments; no customer references yet, or they are from another industry.



- Public procurement for innovative solutions (PPI) by e.g. employing functional specs
- Pilot use by R&D procurement before full-scale deployment

3. No solutions readily available to meet the procurer's needs. The solution must be first developed.



- Pre-commercial procurement (PCP)
- Innovation partnership (development + deployment)

Other aspects to consider when selecting the procurement approach

Time – How much time is needed to develop new solutions? Can innovative solutions be expected to be developed?

- Within tendering process → e.g. competitive dialogue procedure
- Within pre-procurement phase → market consultation
- Within a distinct R&D phase → PCP, innovation partnership

Scope – A complete turn-key solution or modular pieces to be integrated?

Scalability – Will innovation have potential to scale up and diffuse by being replicable?

IPR – Ownership of intellectual property

Public procurement for innovative solutions (PPI)



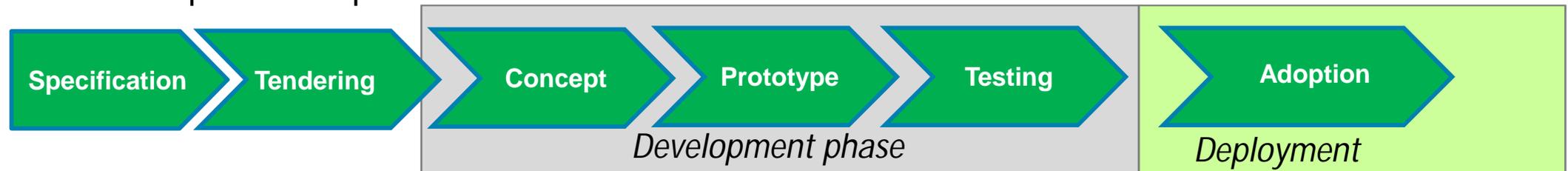
Piloting (preceding procurement of innovative solutions)



Pre-commercial R&D procurement PCP)



Innovation partnership



Specify results, not design

– create room for alternative solutions

Functional requirements

E.g. the solution must allow for flexible transport, fast to deploy, incorporate a self-generating power source

Performance-based requirements

E.g. high-yield water purification capability (clean water X litres / min.)

Lifetime costs

E.g. cost-effectiveness over the product life cycle (Capex, Opex)

Environmental impacts

E.g. carbon footprint / CO2 emission

Summary of key points

1. Ambitious policy targets (climate, service quality etc.) as drivers for innovative solutions.
2. Anticipate large investments and upcoming regulation
3. Engage markets, analyse supplier readiness and select appropriate procurement approach accordingly
4. Manage risks by conducting pilots and experiments before full scale deployment
5. Use functional requirements and performance-based purchasing models to create room for innovative solutions