

Functional procurement for innovation, welfare and the environment

Charles Edquist

CIRCLE, Lund University, Sweden

Jon Mikel Zabala-Iturriagagoitia

Deusto Business School, University of Deusto, Spain

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Introduction

- **Grand challenge** mitigation is framing many **innovation policies** and strategies worldwide (Mazzucato, 2018).
 - Potential of **public procurement for innovation** as a relevant policy instrument aiding in grand societal challenge mitigation (Edquist and Zabala-Iturriagagoitia, 2012).
- According to the results of the ERAC consultation (see ERAC 1209/15), the latest estimations for public procurement expenditure on works, goods and services were close to €2 trillion per year (i.e. 14% of European GDP).
 - Public procurement thus represents a substantial portion of the EU economy and the economies of many countries around the world.

Public Procurement

- PP is when **public** agencies (national, regional, local) **buy** goods and services.
 - PP works from the **demand** side
- Very large:
 - 683 billion SEK in Sweden (2018) = 17.5 % of GDP
 - 2 trillion Euros per year in the EU = 15 – 20 % of GDP in member states
- The share of the whole **PP** spending used to stimulate **innovation** remains insignificant, even if no comprehensive statistics exist as to date about this (Edquist et al., 2018).

Product procurement vs functional procurement. A simple but important distinction

- **“Product procurement”**: the buyer **describes an existing product** that he wants to buy.
- **“Functional procurement”**: the buyer **describes a problem** that shall be solved **or functions** that shall be performed **instead of the product** that shall perform it (i.e. a product is not described) (Edquist, 2017).

Product procurement: the Lyons share

- **To describe an innovation (a non-existing product) is impossible.**
 - No-one can, in advance, describe an innovation (i.e. a non-existing product) since we normally do not even know on which areas an innovation will be based.
- To pursue what has been called '**innovation procurement**', by describing innovations, **is accordingly impossible.**
 - The term 'innovation procurement' neither exists in the procurement law.
- In **product procurement**, The buyer describes an **existing product**, from "the shelf".
 - Often the same product is described as last year, sometimes even obsolete products, and sometimes they are described in great detail.
- Most public procurement is done in a routine-like manner.
 - Simply describing the previously procured product makes it difficult or impossible for **new products (innovations) to be accepted.**
 - Old products are delivered, i.e. it is, as a rule, **not possible to achieve innovation** as a result of product procurement.



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Functional procurement: in its infancy

- Here the buyer describes a problem that shall be solved, or functions that the products wanted shall fulfil.
 - It is a matter of **what** shall be achieved rather than **how** it shall be done.
- All **public procurement** is, of course, intended to **solve a problem** or get a function fulfilled – for the benefit of the citizens.
- It opens up for **creativity, innovations** (new products), higher productivity, increased **competition** (between **suppliers**, but also between different **products**).
 - **Example:** The Public Transportation Agency buys a decibel level instead of a sound barrier or quiet asphalt.



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Functional procurement: further properties

- Innovations do not have to be the result, but **old products are forced to compete with new products** when it comes to the fulfillment of functions (and cost).
- But **the process can end with procurement of the old product.**
 - Functional procurement makes innovations possible, but does not necessarily require them.
- However, **functional procurement can also require an innovation** – if the functional demands exclude supply of the old product (Larger risk).



Paradox

To achieve innovation by means of procurement
we should pursue **functional** procurement
rather than **”innovation procurement”**.

Is functional procurement allowed?

(1)

(EU Procurement Directives 2014: Recital 74).

- This is a quote:

“..., technical specifications should be drafted in such a way as to **avoid** artificially **narrowing down competition** through requirements that favour a specific economic operator by mirroring key characteristics of the supplies, services or works habitually offered by the economic operator.

*Drawing up the **technical specifications in terms of functional and performance requirements generally allows that objective to be achieved in the best way possible.***

Functional and performance-related requirements are also appropriate means to favor innovation in public procurement and should be used as widely as possible.”



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Is functional procurement allowed?

(2)

- A procuring agency can express the technical specifications as performance or functional requirements.
 - Hence **functional requirements can always be used.**
- There are **no legal obstacles to pursuing functional procurement.**
- Procuring agencies should thus avoid to describe products and use functional requirements to the largest extent possible.

A national strategy for public procurement

- In September 2014, the Prime Minister appointed a **minister responsible** for procurement. He created a public agency for "procurement support" in Sept 2015.
- **Functional procurement** was discussed at the first meeting of National Innovation Council in February 2015. Also discussed two additional times, after presentations by the Minister in charge.
- This minister then developed a **National Government Procurement Strategy**, decided by the government as a whole in June 2016.
 - It is a great leap forward, and unique in the world.
 - Functional procurement is a central element in this strategy (goal 5).

The Swedish procurement strategy

- “There is a large potential in using procurement as an instrument to enhance development and **innovation.**”
- “The public sector can also enhance innovation in suppliers by, in procurement, **demand functions** rather than ready solutions.”
- “By **requiring functions** instead of having specific requirements with regard to goods and services, the creativity and ability to innovate of the potential suppliers are enhanced.”
- “To **demand functions can increase competition** in the procurement, since a larger number of firms and organizations can respond to the tenders, which is beneficial particularly for small and medium-sized firms.”
- “... your agency **formulates functional requirements** and emphasizes the result that shall be achieved instead of specific requirements with regard to the goods and services.”
- “... your agency uses assistance from the initiatives and means of support that The National Agency for Public Procurement has developed to **formulate functional requirements in procurement.**”

Significance of functional procurement

- Functional procurement can influence the **rate** ('number', 'speed' and 'importance') AS WELL AS the **direction** of innovation processes: it can **shape innovation**, i.e. **create new innovation trajectories**.
- Functional procurement can be used to solve problems and satisfy needs related to the *environment, climate, energy, urban development, health, transport, defence, etc.*
 - Functional procurement has a large potential as a part of **mission-oriented** policies to mitigate **Grand Challenges**.
- This is related to the **objectives** of innovation policies.

Proposal for the future

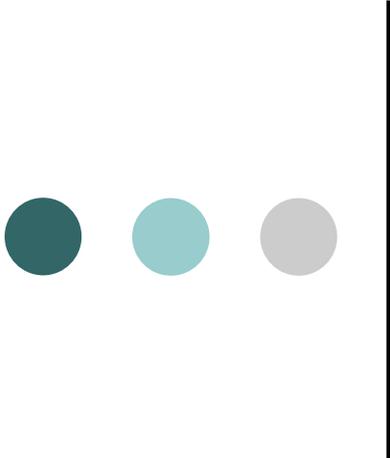
- The proportion of the regular procurement that is performed in functional terms shall be increased by 5 percentage points per year during the next 5 years.
- When 25 % has been achieved after these 5 years, the programme should be evaluated and new decisions taken.
- This would **liberate creativity and innovation** in a very large part of the economy, since it **would concern 5 % of GDP!!!**
 - This is five times the public R&D budget.
- It would also **increase competition** - between **suppliers** and also between **products**.

How to increase functional procurement? (1)

- **Conceptual clarity:** we need a deep understanding of what functional procurement actually is and how it can best be pursued.
- **Politicians and administrators shall not (try to) choose technology in advance.**
- Neither can the **private** market choose technology in **public** procurement, since **the state, the regions and the municipalities are the market.**
- **Instead,** politicians and administrators shall **describe problems and functions.**

How to increase functional procurement? (2)

- Daring to **think** in new ways is good!
- Daring to **act** in new ways is even better!
- **Political guidance and responsibility** are necessary – point with the whole hand!
- Only to encourage in **words** is **not enough** – **sharp decisions must be taken.**
- **Politicians must make demands on functional procurement and "protect" procurers** (to counter risk aversion).



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