



An overview of Public Procurement as a purchasing tool for Innovation: challenges and incentives

BUILD white paper



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Executive summary

This white paper presents key findings and insights from the BUILD project, aimed at strengthening innovation procurement capacities in cities across Europe. The paper explores how Public Procurement of Innovation (PPI) can be adopted more widely across European municipalities, helping them to tackle pressing and complex societal challenges.

Drawing on experiences from the BUILD project, as well as case studies and insights from European municipalities and other PPI related initiatives, the white paper highlights the barriers and enablers of PPI, offering practical strategies for overcoming obstacles. It provides a roadmap for cities seeking to adopt PPI, offering practical recommendations for building capacity, fostering collaboration, and leveraging incentives to drive sustainable growth.

The paper is structured around the following key themes:

- **Introduction to PPI:** this section defines innovation procurement and outlines its strategic importance in achieving public policy goals, such as sustainability and economic growth.
- **State of the art in BUILD Countries:** a review of how PPI is used in participating cities, highlighting differences in adoption and capacity across municipalities.
- **Challenges in Innovation Procurement:** analysis of the key challenges faced by both public buyers and companies in adopting innovation procurement practices.
- **Incentives for Innovation Procurement:** overview of the financial and non-financial incentives that encourage public authorities and companies to engage in innovation procurement.
- **Procurement procedures:** a detailed look at the various procurement methods available to facilitate innovation.
- **Case studies:** Real-world examples from cities such as Turku, Rotterdam, Tartu and Tallinn.
- **Capacity building and mutual learning:** emphasis on the importance of training, staff exchanges, and peer learning as critical tools for building the capacity of public buyers to implement PPI effectively.

About the BUILD project

Building Capacities in Innovation Procurement in Cities (BUILD) is a Horizon Europe project funded by the European Commission. It aims to strengthen the innovation procurement capacities of cities by providing targeted training and capacity-building initiatives for public procurers. Aligned with the EU public procurement directive (2014/24/EU), BUILD equips cities with the tools and expertise needed to implement innovative procurement practices. Through a mix of onsite and online training, the project covers essential topics about Public Procurement of Innovation (PPI). In collaboration with other Horizon Europe projects, such as BUILD and Health InnoFacilitator, PROCEDIN has initiated the Innovation Procurement Task Force (IPTF¹), a joint initiative designed to support procurement in key innovation areas like the circular economy, green mobility, and healthcare.

¹ <https://iptf.eu/>

Introduction

Public procurement is a powerful tool for driving innovation, enabling governments and public organisations to leverage their purchasing power to promote the development of cutting-edge solutions. By strategically procuring innovative goods, services, and processes, public authorities can **stimulate progress** across diverse sectors, ranging from high-tech advancements to the adoption of new applications and methods. This type of procurement not only improves public services but also addresses complex societal challenges such as sustainability, digitalisation, and economic development.

In the European Union, procurement of innovation (PPI) is supported by formal processes that encourage public buyers to explore innovative options within traditional contracting frameworks. These processes, while essential, can be challenging to navigate due to internal organisational complexities, budgetary and resources constraints, and regulatory hurdles. Furthermore, many suppliers - especially small and medium-sized enterprises (SMEs) - face difficulties engaging with the public sector due to the intricacies of procurement requirements.

Despite these challenges, PPI offers immense potential for transformation, particularly within cities, which are at the forefront of efforts to modernise public services and address pressing urban challenges. By embedding innovation-friendly criteria into procurement processes, public authorities can foster collaboration with suppliers, **stimulate market growth, and achieve significant improvements in sustainability and service delivery.**

The insights presented in this white paper are drawn from the **experience of the BUILD project and its synergies with various networks.** They reflect the challenges, solutions, and best practices shared by European municipalities engaged in innovation procurement. This paper provides a roadmap for cities seeking **to enhance their procurement capabilities and drive sustainable innovation** by outlining practical strategies, key procedures, and incentives for fostering successful innovation procurement.

1. Public Procurement of Innovation (PPI) overview

1.1 Definition of PPI - *what*

Public Procurement of Innovation (PPI) refers to the process where **public sector organisations act as purchasers of innovative goods or services that are not yet available in the commercial market**. PPI goes beyond the simple purchase of products and services: it actively **promotes the development of new solutions** tailored to meet **specific public needs**. This process often includes collaboration between public buyers and market suppliers to co-create innovations that solve complex societal and environmental challenges.

PPI can be implemented through various procurement methods, such as pre-commercial procurement (PCP), competitive dialogues, and innovation partnerships, where public authorities work closely with suppliers during the procurement process to ensure the delivery of innovative solutions. These methods will be further explained in section 5 of this white paper.

1.2 Importance of PPI - *why*

Public procurement represents a significant portion of Europe's economy. On average, in Europe, public procurement spending is valued at 12% of Gross Domestic Product (GDP), and 29% of total government expenditure is through suppliers. The Netherlands tops the EU ranking with public procurement accounting for 20.2 percent of GDP, 42% of government spending, and over 193 billion euros per annum. By comparison, Ireland's public procurement spend represents 9% of GDP and 31% of government expenditure.²

Through the strategic use of procurement, governments can stimulate the development of new technologies and services, allowing for more effective and efficient use of public resources. The long-term benefits generated can include:

Economic growth: by investing in innovation, public procurement can stimulate markets, create jobs, promote competitiveness and support start-ups and innovative SMEs to launch and grow, improving the overall innovation ecosystem.

Sustainability: PPI plays a crucial role in achieving environmental goals by promoting the development of sustainable products and services, using specific criteria in the purchases.

Strategic need for PPI

The adoption of PPI is driven by the need for more **flexible and modern approaches to public service delivery**. Traditional procurement methods often fail to provide solutions to complex problems faced by public authorities. PPI addresses this by allowing public buyers to procure services and products that may not yet be commercially available, enabling them to **meet emerging needs** effectively.

Furthermore, **PPI fosters closer collaboration between the public and private sectors**, allowing for the **joint development of innovative solutions** that can have a significant impact.

PPI is also seen as essential for **scaling up innovation across different regions and sectors**, enhancing the capacity of public procurement offices, and creating opportunities for shared learning and cooperation. It provides a strategic tool for municipalities to achieve both **local and broader policy goals**.

² [OECD PP expenditure](#)

Improved public services: innovation in procurement can lead to the provision of higher-quality services, such as healthcare, transportation, and education, benefiting citizens directly.

By incorporating innovative procurement practices, public bodies are better equipped to **address pressing challenges such as digital transformation, environmental sustainability, and demographic shifts.**

2. State of the art of PPI

2.1 Overview of PPI adoption

Across Europe, Public Procurement of Innovation (PPI) is increasingly being adopted by public authorities as a strategic tool to drive innovation, improve public services, and stimulate economic growth. However, the level of adoption varies significantly between countries and municipalities. Some regions have fully integrated PPI into their procurement frameworks, while others are still in the early exploration and capacity building stages.

2.2 PPI adoption in BUILD project municipalities and related networks

Municipalities in the BUILD project, as well as other key European countries like Poland and the Czech Republic, exhibit a range of PPI adoption levels, reflecting differences in governance structures, political will, and resource availability.

Finland: in Turku, PPI has been integrated into local procurement strategies with a focus on sustainability and innovation. Local authorities utilise an innovation potential assessment tool to identify opportunities for innovation, particularly in urban development and public health. This structured approach allows Turku to align procurement practices with broader sustainability goals.

Estonia: Tartu has made strides in infrastructure procurement but still faces

challenges due to the decentralised nature of its procurement processes. Nevertheless, the city has undertaken several initiatives in innovative procurement, particularly in education and urban planning.

Slovakia: PPI in Slovakia is still in a nascent stage, with municipalities building capacity in innovative procurement. The focus has primarily been on sectors such as energy efficiency and environmental sustainability. However, there is growing interest in using PPI as a tool for public sector modernisation.

The Netherlands: Rotterdam has a **mature innovation procurement system**, characterised by flexibility and a focus on sustainability. The city uses innovative procurement methods such as **competitive dialogues and innovation partnerships** to support local businesses and address urban challenges. Local authorities emphasise **sustainable procurement**, which has been **integrated into their broader urban development strategies.**

Poland: Poland has made remarkable progress in embedding PPI into its public procurement framework through the "State Purchasing Policy 2022-2025." Public authorities are advised to allocate 3% of their budget to research and development (R&D) procurement and 20% to innovative solutions. This strategy positions Poland as a **frontrunner in innovation procurement**, with public buyers encouraged to tailor their procurement activities to local needs. A **monitoring framework**

ensures the effective implementation of these policies, while the **Public Procurement Office regularly provides training and guidelines to support capacity building.**



Czech Republic: The Czech Republic's innovation strategy aims to transform the country **from a “Moderate Innovator” to an “Innovation Leader” by 2030.** The national strategy sets ambitious targets, such as allocating 3% of the country’s GDP to R&D by 2030, with a significant portion dedicated to PPI. The country’s commitment to innovation is reflected in its **increasing public expenditure on research and development**, highlighting the growing role of **PPI in its national policy.**³

Learn about other cases with PROCEDIN project’s [white paper on Enabling PPI](#)

2.3 Factors influencing PPI usage

Several factors shape the adoption of PPI in these countries and municipalities.

Legal and regulatory frameworks: countries with more **flexible procurement regulations tend to have a higher uptake of PPI.** Poland and the Czech Republic have introduced **specific policies and competence centers** to encourage innovation procurement, setting clear targets for public expenditure on R&D and innovative solutions. In contrast, in some countries, **rigid procurement rules may limit innovation.**

Institutional capacity: Municipalities with **specialised procurement teams and support from competence centers**, are better

equipped to integrate PPI into their procurement strategies. These competence centres provide **guidance and support to public buyers**, ensuring the smooth implementation of innovative procurement practices. Setting up specialised procurement teams is not always possible as it depends on the local reality’s size and resources. That’s why it is important to also have a **centralised capacity building system.**

Political support: The level of political backing varies significantly. For instance, Poland and the Czech Republic have strong national policies promoting PPI, with government bodies actively supporting its integration into procurement strategies. In other countries, the lack of political prioritisation may slow down the uptake of innovation procurement.

³ [SIPE Conference Insights Report](#)

3. Challenges related to the procurement of innovation

Innovation procurement faces numerous challenges that affect both public procurers and companies. In this section, both procurers' and companies' perspectives are represented. The findings were made possible thanks to the market consultations workshops organised within BUILD.

3.1 Challenges from the procurers' perspective

The main challenges for public authorities include:

Lack of expertise and capacity: procurers often **lack the specialised knowledge and skills** required to carry out complex innovation procurement processes. This includes **understanding how to define innovation within the procurement framework** and navigating the legal and procedural complexities of innovative procurement methods.

Risk aversion: public sector organisations are traditionally risk-averse, **preferring tried-and-tested solutions over innovative approaches that may carry higher levels of uncertainty.**

This cautious approach can limit the willingness of public buyers to invest in new, unproven technologies or solutions, even when these innovations offer long-term benefits. In some cases, the relation between higher risk procurements and long-term benefits are not considered in the political strategy, as this might prefer shorter, safer public purchases, to increase rapidly public consent.

Rigid procurement procedures: many public **procurement frameworks** are designed around **rigid**, prescriptive rules that make it difficult to introduce flexibility for innovation.

Budget constraints: Innovation Procurement often requires a **significant upfront investment**, which can be difficult to justify in the context of tight public sector budgets. Procurers may struggle to allocate sufficient resources to support innovation, even when the long-term savings or benefits are evident

Lack of political support: In some cases, the absence of strong political backing for innovation procurement means that it is not prioritised within public procurement strategies. Without clear mandates or policy frameworks encouraging innovation, procurers may be hesitant to pursue more ambitious procurement goals.⁴

3.2 Challenges from the companies' perspective

From the perspective of companies—particularly small and medium-sized enterprises (SMEs) and startups— there are several obstacles to participating in public procurement of innovation:

Complex and lengthy procedures: the **bureaucratic complexity and time-consuming nature of public procurement** processes can

be a major deterrent for companies, especially SMEs, which may lack the resources

⁴ [SIPE Conference - Policies Perspectives](#)

to navigate complex tender procedures or lack staff.

Unclear requirements: innovation procurement often involves a **lack of clarity in terms of expectations**. Procurers may not have a clear idea of the innovative solutions they are seeking, which makes it difficult for companies to respond effectively. This lack of precision can lead to **mismatches between the solutions offered by companies and the needs of public buyers**.

Financial risks: participating in innovation procurement often involves considerable financial risk for companies, particularly if

they are expected to **invest heavily in R&D without a guaranteed contract**. This is particularly challenging **for SMEs**, which may not have the financial stability to take such risks.

Limited market opportunities: for many companies, the **market for innovative solutions** in public procurement remains relatively **small**. In **some sectors or regions**, the **demand for innovation is low**, making it difficult for companies to scale up their innovative solutions.

4. Addressing PPI barriers

4.1 Solutions to the challenges and policy recommendations

Despite these challenges, several strategies can be implemented to mitigate the barriers to innovation procurement and create a more supportive environment for both public procurers and companies:

Capacity building and training: to address the lack of capacity, strategies like outsourcing routine purchasing tasks to other departments can save time for more complex procedures. Additionally, introducing **automation and digitalisation tools**, such as the Dutch dynamic purchasing system (DAS), can streamline procurement processes. Joint initiatives across departments and municipalities, as well as planning **tools for assessing innovation suitability**, can also help alleviate capacity constraints.

Incremental approach to Innovation

Procurement: for cities new to PPI, taking an incremental approach is essential. **Gradually introducing PPI** lowers the learning threshold and makes the process more accessible.

Risk mitigation measures: risk-sharing mechanisms, such as **co-financing**, can help public authorities distribute the financial risks associated with innovation procurement

Seeking **advice from topic experts in areas** such as sustainability or circular economy can also help identify innovation opportunities and manage risks.

Support for SMEs: policymakers should implement measures that **reduce the complexity of procurement processes for SMEs**. This could include offering simplified tender procedures, **clear guidelines**, and **reducing financial barriers** through targeted support programs. Structuring procurement contracts to be more accessible to smaller companies is key to fostering innovation.

Enhanced market engagement: public buyers should actively engage with the market through **regular consultations** and **pre-tender discussions**, which allow suppliers to better align their solutions with the needs of public authorities.

Political commitment and strategic alignment: political commitment to innovation procurement is essential for its success. National and local governments need to **prioritise PPI within their policy frameworks**, setting clear targets and key performance indicators (KPIs) for innovation procurement.

Aligning procurement strategies with broader policy goals—such as sustainability, digitalisation, and economic growth—ensures that PPI is integrated into **long-term public sector objectives**.

4.2 Incentives for Innovation Procurement

To fully unlock PPI’s potential, the right incentives must be in place. In this section, several existing and potential incentives strategies are presented.

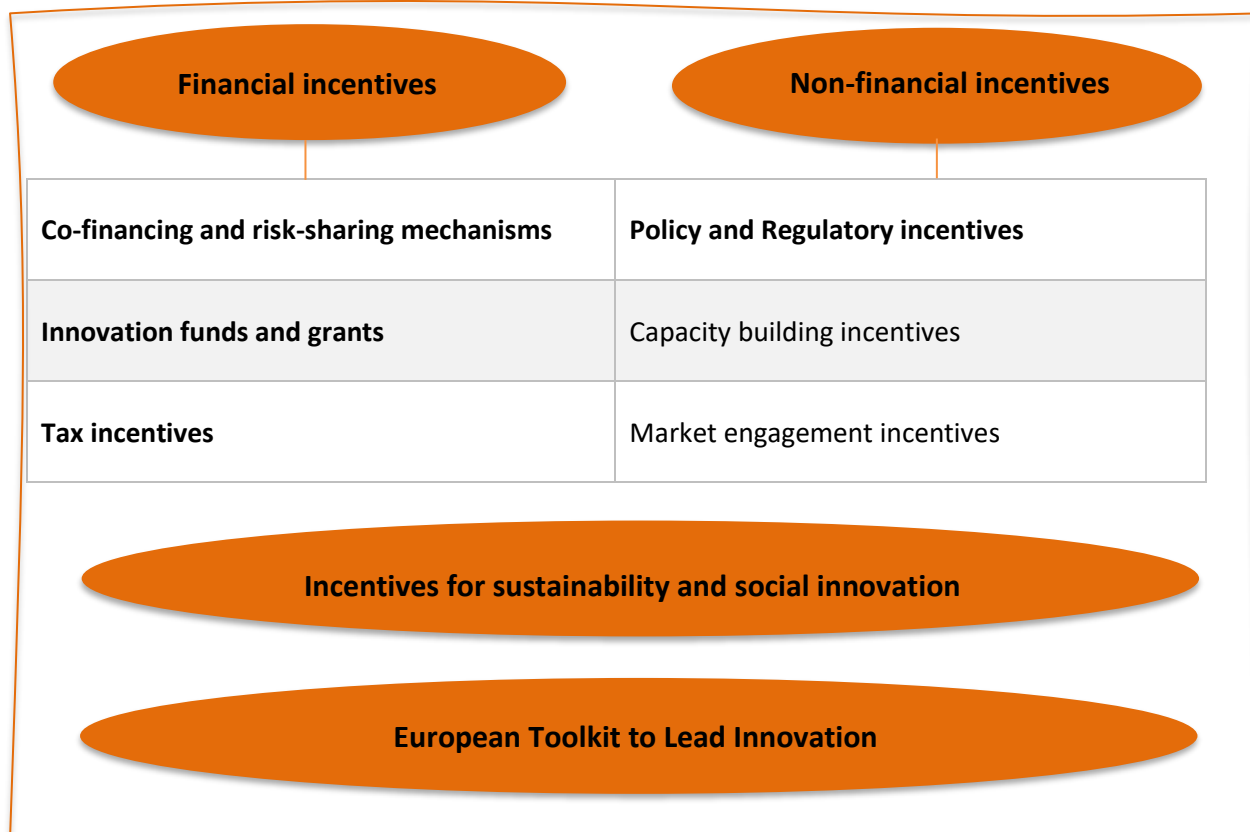


Figure 1 - Incentives for PPI

4.1 Financial incentives

Financial support is often the **most direct way** to incentivise innovation procurement. Several mechanisms can be utilised by public authorities to encourage innovation:

Co-financing and risk-sharing mechanisms: co-financing programs, where **public**

authorities share the financial burden of developing innovative solutions with

suppliers, are an effective way to mitigate risks. This reduces the financial pressure on suppliers, particularly SMEs, and allows them to participate in public procurement processes with greater confidence

Innovation funds and grants: many countries have established **dedicated innovation funds or grants** specifically designed to support public procurement of innovation. These funds provide financial support for both the public sector and companies engaged in developing and implementing innovative solutions. For example, in Poland, public

buyers are advised to allocate 3% of their budget to research and development (R&D) procurement and 20% to innovative solutions.⁵

Tax incentives: governments can also provide **tax breaks** or other fiscal incentives for companies that invest in research and development. This **encourages the private sector** to engage more actively in innovation procurement, making it easier for companies to take on the financial risks associated with developing new technologies and services.⁶

4.2 Policy and regulatory incentives

In addition to financial support, policy and regulatory frameworks can serve as powerful incentives to foster innovation procurement:

Mandatory innovation targets: setting **mandatory targets** for innovation procurement, as seen in countries like Poland and the Czech Republic, can drive the adoption of PPI across the public sector.

Streamlined procurement processes: simplifying procurement procedures to make them more accessible to PPI stakeholders. Flexible procurement methods, such as competitive dialogues or innovation partnerships, allow for more dynamic and collaborative processes that foster innovation.

Regulatory flexibility: governments can introduce **flexible legal frameworks** that support innovative procurement methods, allowing public buyers to experiment with new solutions. For example, some municipalities have adopted frameworks that reduce the regulatory burden on smaller procurement contracts, making it easier for public authorities to engage with local SMEs .

4.3 Capacity-building incentives

Providing training, guidance, and other resources helps public buyers navigate the complexities of PPI and makes it easier for them to identify and implement innovative solutions:

Competence centers: dedicated competence centers, such as the KEINO Competence Centre in Finland or PIANOo in the Netherlands, provide training and support to public procurement professionals. These

centers help procurement officers build the skills needed to engage in innovation procurement and offer advice on navigating legal and procedural challenges.

^{5,6} [SIPE Conference](#)

EU-Funded training programs: programs funded by the European Union, such as those offered by [PROCEDIN](#), [BUILD](#), [Health InnoFacilitator](#) and [others](#), offer free or low-cost training on innovative procurement

practices. These initiatives are essential for enhancing the capabilities of procurement practitioners, particularly in regions where expertise in innovation procurement is limited.

4.4 Market engagement incentives

Public authorities can create incentives that encourage suppliers to participate in the procurement of innovative solutions:

Pre-Commercial Procurement (PCP): Pre-commercial procurement is a process that allows public authorities to **engage with companies during the R&D phase**, fostering collaboration and innovation before products reach the market. This reduces the risk for companies, as they are assured of public sector interest in their innovative solutions.

Increased transparency and market dialogue: establishing clear communication channels between public buyers and the market is essential for encouraging innovation. Public authorities can conduct **regular market consultations and pre-tender dialogues** to ensure that suppliers are aware of upcoming opportunities and have a clear understanding of the public sector's innovation needs.

4.5 Incentives for sustainability and social innovation

By aligning procurement strategies with sustainability and social impact objectives, public authorities can incentivise the development of solutions that address pressing societal challenges:

Green Public Procurement (GPP): many municipalities have integrated sustainability into their procurement strategies through Green Public Procurement (GPP) initiatives. These initiatives incentivise suppliers to develop environmentally friendly solutions by prioritising contracts that align with sustainability goals, such as reducing carbon emissions and promoting resource efficiency .

Social innovation: public authorities can also incentivise innovation that addresses social challenges, such as inequality, education, and healthcare. By including social impact criteria in procurement tenders, governments can encourage companies to develop solutions that have a positive impact on society .

4.6 The European Toolkit to Lead Innovation

The European Commission adopted the **New European Innovation Agenda** in July 2022, aiming to position Europe as a global leader in innovation, particularly in deep tech sectors. This agenda focuses

on fostering cutting-edge innovations that address global challenges through cross-sector collaboration.

Focus on digital and science innovation: two waves of innovation drive the European agenda:

- **Digital and deep-tech innovation:** leveraging advancements in supercomputing, artificial intelligence, and automation to improve productivity and drive breakthroughs across various fields, such as healthcare, environment, and mobility.
- **Deep science innovation:** emphasising new materials, biotechnology, and nanotechnology, with the goal of transforming key sectors like healthcare, food, and environmental sustainability.

The agenda aims to overcome barriers to technology adoption by:

- **Improving access to finance:** mobilising untapped private capital and simplifying listing rules to support startups.
- **Encouraging experimentation:** creating regulatory sandboxes to allow safe testing of innovative solutions.
- **Building regional innovation valleys:** strengthening innovation ecosystems across Europe.
- **Attracting and retaining talent:** training deep tech talents and increasing support for women innovators.

[The European Innovation Council \(EIC\), European Institute of Innovation and Technology \(EIT\)](#), and other EU initiatives, such as **Horizon Europe's Innovation Ecosystems Initiative**, are providing crucial support for start-ups, SMEs, and research-driven projects aimed at scaling innovation across Europe.

5. Procedures used to purchase innovative solutions

Innovation procurement requires specific procedures that allow public authorities to collaborate effectively with suppliers and explore new solutions. These procedures go beyond traditional procurement methods, enabling more flexible, iterative, and outcome-focused approaches to purchasing.

The decision tree⁷

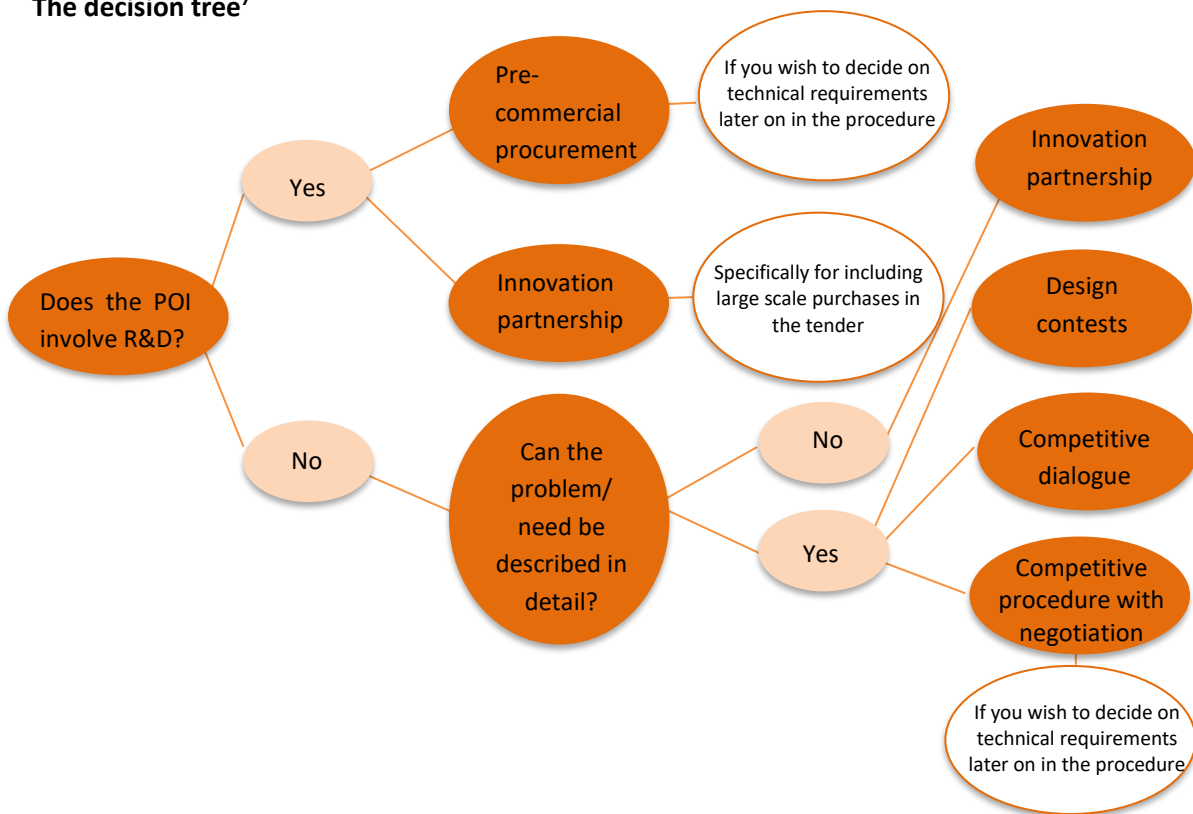


Figure 2 - Decision tree

5.1 Pre-Commercial Procurement (PCP)

Pre-commercial procurement (PCP) is an approach that **allows public authorities to engage with the market during the research and development (R&D) phase**, long before any products are commercially available. This procedure is particularly **useful when public buyers are looking for new technologies or solutions that don't yet exist on the market.**

Process

PCP typically involves multiple phases, including solution exploration, prototyping, and testing. It allows public buyers to **work directly with companies to co-develop solutions**, offering contracts for R&D services rather than the purchase of finished products. The goal is to reduce the risk associated with innovation by collaborating with the market early in the process.

Advantages PCP fosters innovation by incentivising suppliers to invest in R&D and by enabling public buyers to **tailor solutions to their specific needs**. It also promotes **competition among suppliers**, encouraging them to deliver cutting-edge solutions. This approach is commonly used in sectors such as healthcare, defense, and digital technologies.

⁷ [PROCEDIN whitepaper](#)

Case studies on PCP by the European Commission: <https://digital-strategy.ec.europa.eu/en/news/precommercial-procurement-showcases>

5.2 Competitive dialogue

Competitive dialogue is a procedure used **when public authorities know the outcome they want to achieve but are unsure of the specific solution or how to achieve it**. This method allows for open communication between the public buyer and potential suppliers to develop the **best possible solution**.

Process

In a competitive dialogue, public buyers invite selected suppliers to discuss the project in detail. These discussions enable both parties to explore different solutions, refine requirements, and address potential challenges. After the dialogue, suppliers submit their final proposals based on the agreed specifications.

Advantages

this procedure is particularly useful for complex projects where the procuring authority **needs to rely on the expertise of suppliers to shape the final solution**. It is often used for large infrastructure projects, IT systems, and innovation-driven procurement .

5.3 Innovation Partnership

Innovation partnerships are a relatively new procurement procedure that allows **public authorities to partner with one or more suppliers to research, develop, and then purchase innovative solutions**. Unlike PCP, which focuses only on the R&D phase, **innovation partnerships cover the entire process from R&D through to commercialisation**.

Process

Public authorities first identify their unmet needs and define the **scope** of the partnership. They then select one or more **suppliers** to collaborate with in the development of a solution. Once the solution is developed and meets the agreed-upon criteria, the public buyer can purchase the final product or service directly from the partner without the need for a separate procurement procedure.

Advantages

Innovation partnerships offer a **long-term collaborative framework** that reduces the risks associated with procuring new, unproven technologies. This procedure is particularly suited to sectors where the public buyer is seeking solutions that are not yet available on the market, such as environmental sustainability, healthcare, and urban mobility.

5.4 Competitive procedure with negotiation

This procedure allows public authorities to **enter into negotiations with suppliers after the submission of initial tenders**. It is used when the buyer is seeking innovative solutions but needs **flexibility to negotiate the details of the contract** with potential suppliers.

Process

After an initial tendering process, the public buyer may enter into negotiations with suppliers to refine **aspects of the project, including pricing, design, and implementation**. This **flexibility** helps ensure that the final contract meets the buyer's innovation needs without locking them into a rigid agreement from the start.

Advantages

The competitive procedure with negotiation allows for greater adaptability, enabling public buyers to refine and adjust their requirements as the procurement process progresses. This method is often used for highly technical projects or **when the market is evolving rapidly**, such as in IT and advanced technology fields.

5.5 Framework agreements

A framework agreement is a procurement method that **establishes terms and conditions under which specific contracts can be awarded during a set period**. These agreements are often used in the context of innovation procurement to provide flexibility and enable ongoing collaboration with suppliers.

Process

Public buyers set up a framework with one or more suppliers that outlines the general conditions of future procurement projects, **such as pricing, delivery schedules, and technical requirements**. Specific projects or solutions can then be contracted under this framework without the need for a separate procurement process for each project.

Advantages

Framework agreements are ideal for fostering long-term partnerships and enabling flexibility. They allow public buyers to adapt procurement strategies over time and provide suppliers with a more predictable pipeline of opportunities. Framework agreements are often used in sectors where rapid technological change requires ongoing adaptation, such as energy efficiency and digitalisation.

5.6 Dynamic Purchasing Systems (DPS)

Dynamic Purchasing Systems (DPS) are **fully electronic procurement procedures that are designed to simplify the procurement process for innovative solutions**. DPS allows suppliers to join the system at any time, making it easier for public authorities to engage with a wider range of suppliers throughout the duration of the system.

Process

The DPS is established for a **specific category of products or services**. Suppliers can apply to join the system at any point, and public authorities can award contracts under the system as needs arise. This **continuous competition** helps ensure that public buyers have access to the most up-to-date solutions.

Advantages

DPS offers flexibility and allows for the rapid procurement of innovative solutions as new technologies emerge. It is particularly useful **in fast-evolving sectors such as ICT**, where ongoing innovation requires public buyers to have access to the latest developments .

6. Case studies

The power of innovation procurement can be seen in real-world examples that demonstrate its capacity to drive sustainable development, enhance public services, and foster cross-sector collaboration. In this section, there are presented several case studies from cities that have successfully leveraged innovation procurement to address key urban challenges.

6.1 Finland's green deal: paving the way for fossil-free worksites

Finland's ambition to achieve fossil-free worksites by 2025 is a prime example of how innovation procurement can support environmental goals. In 2020, the City of Turku participated in a **nationwide initiative by launching a procurement process for eco-friendly machinery** to be used in infrastructure maintenance on the city's east side. The procurement strategy embraced **open tendering with green criteria**, focusing on machinery that complied with Euro 6 and Stage III B emissions standards and included real-time tracking to optimise efficiency.

This forward-thinking approach incentivised service providers with bonuses of up to €20,000 per year for carbon-neutral innovations. The three-year contract, with the option for two additional years, proved successful in encouraging sustainable practices while fostering innovation in public projects.

6.2 Rotterdam's zero emission deliveries

Rotterdam set a bold **target of achieving zero-emission deliveries for goods and services by 2025**. To meet this ambitious goal, the **Procurement Department partnered with the Department of Sustainability and Mobility**, making emission-free transport a key criterion in procurement evaluations. By **integrating award criteria** into tenders and implementing contract management systems that verified emission-free deliveries, Rotterdam ensured accountability and transparency in their innovation procurement practices.

This approach led to the deployment of innovative solutions, including electric garbage trucks and hydrogen-powered vacuum cleaners.

6.3 Mobility as a Service (MaaS) in Tartu and Tallinn

In the Estonian cities of Tartu and Tallinn, the pressing need for Mobility as a Service (MaaS)

solutions prompted the initiation of an innovative procurement process. Recognising the absence of suitable solutions in the market, the cities sought to **create a self-financed MaaS business model without municipal subsidies**. To achieve this, they adopted a **competitive dialogue approach** that engaged multiple companies and leveraged diverse expertise.

The process, which ran from 2021 to 2023, involved careful attention to legal and GDPR

considerations, as well as collaboration with IoT and mobility experts. The cities also benefited from **50% state funding, allowing them to finance the project**. The procurement underscores the potential for innovation procurement to address urban mobility challenges, paving the way for more sustainable and efficient transportation solutions, even if they don't meet completely the expectations. As an example, the MaaS solution was finished, but not in the intended capacity and functionality.

Collection of best-case practices by the BUILD project partners: http://www.build-procurement.eu/wp-content/uploads/2024/09/BUILD_Innovation-Procurement-

7. Increasing capacity building and mutual learning

Capacity building and mutual learning are essential components of fostering innovation procurement, ensuring that public buyers and other stakeholders have the skills and knowledge necessary to successfully navigate and implement complex procurement processes. Through training sessions, staff exchanges, and peer learning activities, municipalities can strengthen their capacity to embrace innovation and collaborate on best practices.

The BUILD project has focused extensively on enhancing the capacity of public buyers through a **series of training sessions, staff exchanges, and peer learning activities**.

Key areas of focus included **sustainable procurement, PPI methods, legal and procedural aspects, including legal frameworks and risk management**.

These activities were crucial in providing procurement officers with the **foundational knowledge** needed to implement innovation procurement practices effectively.

The trainings sessions were successful thanks to the **interactive learning format**, allowing for active participation. The topics and **real-case studies** were **tailored to the need of each municipality**, ensuring that training was relevant and directly applicable to the contexts in which participants were working. This localised approach was particularly valuable in addressing region-specific legal and procedural constraints.

7.1 Observations and lessons learned from staff exchanges

The staff exchanges within the BUILD project provided a unique opportunity for public buyers to learn from their peers in other cities and countries. By spending time in different municipalities, participants

were able to observe innovative procurement processes in action and exchange ideas on best practices.

Differences among cities: one of the key lessons learned from the staff exchanges was the significant variation in how cities approach innovation procurement. Differences in **governance structures, political priorities, and regulatory environments** led to different approaches in procurement strategies. However, despite these differences, all participants agreed that innovation procurement holds transformative potential for municipalities **willing to invest in capacity building**.

Capacity building as a continuous process: the exchanges emphasised that **capacity building** in innovation procurement is not a one-time event but an **ongoing process**. Municipalities must **continue to invest in training, peer learning, and staff exchanges** to keep up with the evolving landscape of procurement, technological advancements, and sustainability goals.

Leveraging external expertise: many municipalities found success in involving external experts in their procurement processes, particularly in areas such as sustainability, energy efficiency, and digitalisation. **External support** from consultants, NGOs, and competence centers provided the specialized knowledge needed to address complex procurement challenges.

Mutual learning opportunities: staff exchanges also highlighted the value of **peer learning**, where participants could learn directly from their counterparts in other cities. For example, **smaller municipalities gained insights from the more established innovation procurement frameworks in larger cities** like Rotterdam, while larger cities **learned about the flexibility and adaptability** of smaller municipalities.

Conclusions

Several key conclusions can be drawn from the project's outcomes and its synergies network:

Incentives and procedures: both financial and non-financial incentives in driving innovation procurement are essential. Financial mechanisms such as co-financing, grants, and bonuses for sustainability-driven procurement are instrumental in encouraging companies to participate in public tenders. Moreover, procedures like competitive dialogue, innovation partnerships, and pre-commercial procurement allow public authorities to engage more flexibly with the market, fostering the development of tailored, innovative solutions.

Overcoming challenges: while there are challenges associated with the procurement of innovation—such as capacity limitations, risk aversion, and complex legal frameworks—there are practical solutions that can help overcome these barriers. Capacity-building initiatives, such as training sessions and staff exchanges, provide public buyers with the knowledge and tools needed to navigate the complexities of innovation procurement. Moreover, collaboration with external partners and networks is a key enabler for municipalities lacking internal resources.

Strategic Importance of PPI: PPI is not just a procurement tool; it is a strategic instrument that allows municipalities to drive innovation, sustainability, economic progress but also achieving broader policy objectives, such as the European Green Deal and the Digital Europe strategy.

Varied adoption across Europe: the state of PPI adoption across BUILD project countries varies significantly, with some municipalities embracing innovation procurement as a core strategy, while others are still building the capacity to do so. Differences in legal frameworks, political support, and resource availability remain key factors that influence the extent to which innovation procurement is used.

Case studies as models of success: the real-world case studies from cities like Turku, Rotterdam, and Tallinn provide compelling examples of how innovation procurement can lead to tangible outcomes. These examples illustrate that by aligning procurement strategies with sustainability and innovation goals, municipalities can achieve significant environmental and economic benefits while improving public services.

Capacity building as a key driver: building the capacity of public buyers through continuous training, staff exchanges, and peer learning is critical to the success of innovation procurement. The maximum efficiency can be reached only through continuous efforts and investments in these activities, as it's a continuous learning process.

Looking ahead

As Europe continues to tackle pressing challenges such as climate change, digital transformation, and the need for resilient urban infrastructure, innovation procurement will play an increasingly vital role. Municipalities must continue to invest in building their capacity, leveraging collaborative networks, and exploring new procurement procedures that foster innovation.

The lessons learned from the BUILD project provide a roadmap for municipalities seeking to harness the power of innovation procurement. To ensure continuous support to future Innovation Procurers, BUILD partners developed a comprehensive Educational Library aiming at supporting capacity building and knowledge sharing among public buyers and PPI stakeholders.

Access the BUILD Educational Library



Lesson plan with three educational packages for Public Buyers
(Introduction to PPI, PPI simulations and consolidated training
approach, Lessons learned)
15 quiz cards
Collection of 8 best-case practices
Policy Recommendations booklet to enhance PPI adoption
Webinars on PPI methods and exchange of best practices
SIPE conference report and session video
BUILD factsheet in different languages
Factsheet on job profiles in PPI
Synergies in PPI (IPTF, related projects and initiatives, PROCEDIN
Resources bank, Training workshops by the Health
InnoFacilitator project)
3 knowledge pills (Incentives, challenges and procedure in PPI)
Market consultation report
BUILD Insights Report
Insights on the training sessions for public buyers
Mutual learning across cities with BUILD staff exchanges

[Access it here](#)

BUILD

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