



# Innovation Procurement

A Policy Brief from the Policy Learning Platform on  
Research and Innovation

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**Interreg  
Europe**



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### Summary

This policy brief explores the role of innovation procurement for regional development. **Innovation procurement** is an important policy tool that aims to support public buyers so that they can shape new markets, support innovative SMEs and contribute better to the green and digital twin transitions and the resilience of the EU. This policy brief summarises the main points from the **European Commission Guidance on Innovation Procurement** to support regional policymakers in better navigating innovation procurement policies. Many Interreg Europe projects have investigated local and regional policies to promote **pre-commercial procurement (PCP)** and **public procurement of innovation (PPI)** offering many insights for regional policy learning. This policy brief features five policy recommendations using the experience of Interreg Europe projects to inspire policymakers to better design and deliver innovation procurement policies.

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## Foreword. Elvira Uyerra, Professor of Innovation Studies, University of Manchester, United Kingdom.

**Public procurement is a key**, yet under-exploited, industrial policy tool that can be used to stimulate and unlock private sector innovation and productivity, foster industrial renewal and the development and diffusion of socially desirable technological solutions. Far too often, innovation is hampered not by a lack of technological knowledge, but because the market is too uncertain or fragmented to support those innovations. This is where public procurement, where EU countries spend on average around 14% of GDP, can help. Public procurement influences innovation through shaping the size, specificity, technical sophistication and direction of demand, by e.g. providing a testing-ground that can reduce technological risks for innovative products; creating demand ‘pull’ by it guaranteeing a level of production that reduces market uncertainty, or by enabling particular standards that help the diffusion of innovations.

Public authorities can thus shape markets for new and potentially transformative technologies, particularly when procurement is used in combination with other supply side and demand side measures such as standards and regulatory change.

Public procurement is, however, a complex policy tool, that requires capacity building, a long-term strategic vision, policy mix coordination and market engagement.

This policy brief provides valuable guidance as to how to do this. Its guidelines and recommendations should inspire public buyers to do not just better procurement, but to procure better things that supports vital government functions and enhances the innovation capacity and resilience of European regions.

## 1. Introduction

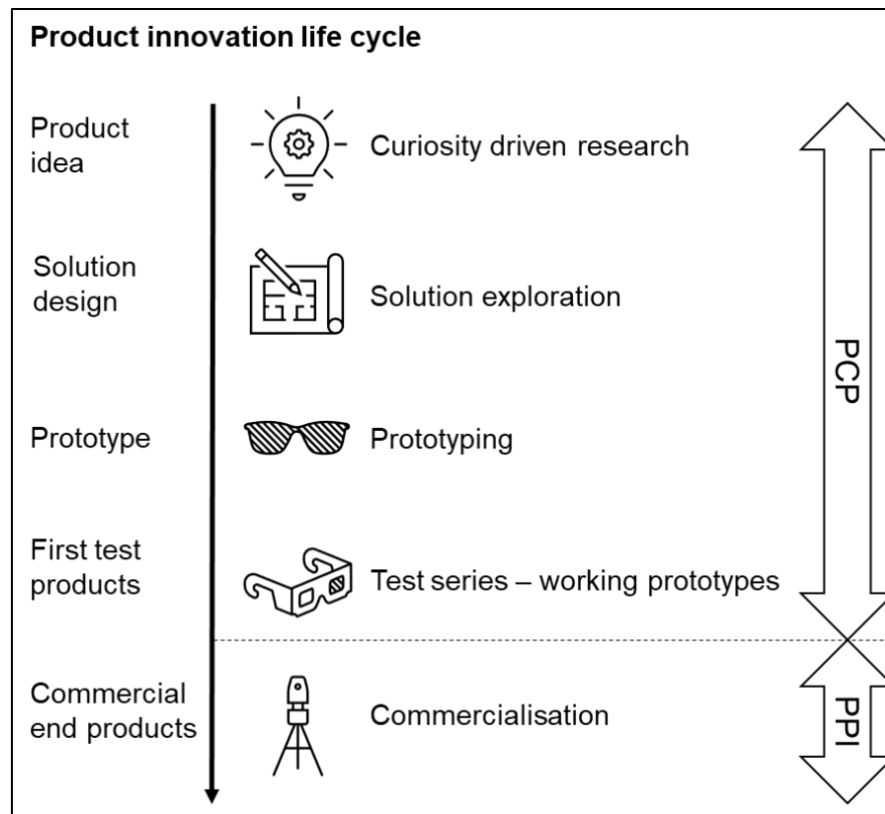
### What is Innovation Procurement?

**Innovation procurement refers to any public procurement where:**

- **the public buyer purchases the process of innovation**—research and development (R&D) services—with (partial) outcomes. The public buyer first describes its need, prompting businesses and researchers to develop innovative products, services, or processes, which do not yet exist on the market, to meet the need.
- **the public buyer purchases the outcomes of innovation.** The public buyer acts as an early adopter and buys a product, service or process that is new to the market and contains substantially novel characteristics (see the [Guidance on Innovation Procurement](#)).

This policy brief distinguishes between **pre-commercial procurement (PCP)** and **public procurement of innovation (PPI)** (see figure 1):

- **Pre-commercial procurement (PCP)** is a demand-side innovation approach to develop R&D services with the objective to stimulate innovation. The activity is undertaken by a government or a public private partnership, to support innovation through the purchase of R&D services, which usually includes the delivery of a ‘product prototype’ ([Rigby](#)).
- **Public procurement of innovation (PPI)** is a demand-side innovation policy instrument in the form of an order, placed by a public organisation, for a new or improved product to fulfil its particular needs ([Edquist et al.](#)).



**Figure 1.** Pre-commercial procurement (PCP) vs public procurement of innovation (PPI). Source: the authors from the European Commission.

### Why is innovation procurement important?

Innovation procurement aims to increase the demand for innovations, to improve the conditions for the uptake of innovations or to improve the articulation of demand to spur innovations and the diffusion of innovations (Edler and Georghiou). It can be used strategically to **stimulate markets** and to be incorporated in the regional policy-mix as a means both of **addressing societal challenges** and of enabling structural changes (Uyarra et al.). The European Commission is actively promoting the use of innovation procurement to respond to societal challenges such as ageing population, poverty, climate change, security threats...

In the European Union, public authorities spend around 14% of the GDP on the purchase of services, works and supplies from many sectors such as energy, transport, waste management, social protection and the provision of health or education services (European Commission). Innovation procurement is thus at the centre of the **EU innovation policy agenda** to promote the Europe's SMEs Strategy, the Industrial Strategy, and the Recovery and Resilience. At the regional level, innovation procurement is one of the emphasised policy tools to support the implementation of the smart specialisation strategy (S3).

The use of innovation procurement as a policy tool to create new markets is not limited to innovation leaders' regions that have high institutional and governance capacities. In a moderate innovation context for instance, the region of Galicia in Spain has pioneered the use of innovation procurement to nurture innovation and entrepreneurship in the health sector and the drone industry with the Civil UAVs Initiative (CUI) (see policy recommendations 4 and 5). Innovation procurement is a relevant policy tool to find regional solutions to place-based societal challenges (read our policy brief on **open, social, and responsible innovation**).

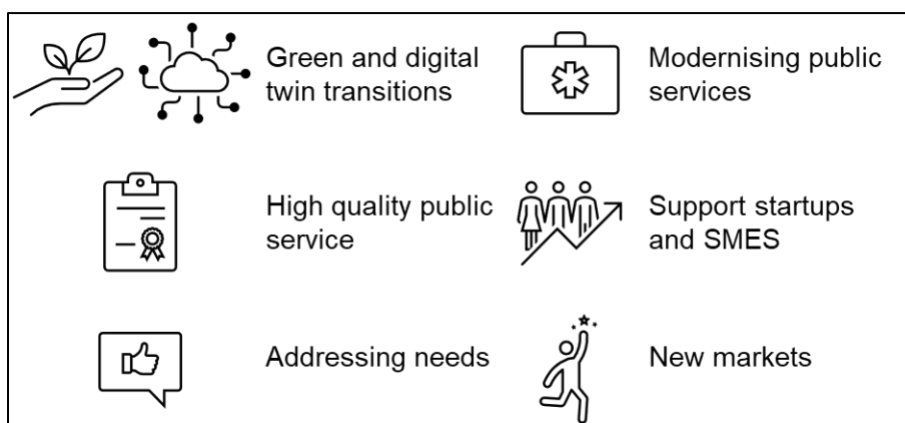


### Box 1. The Policy Learning Platform can help you to better deliver regional innovation procurement policies.

The **Interreg Europe Policy Learning Platform** can help local and regional policymakers to better design and implement innovation procurement by facilitating the exchange of experience from different institutional contexts, sector policy support and showcasing success stories via the **Good practice database**. The **Policy Learning Platform** can provide a forum for direct discussions among partners from different projects – either in thematic workshops, **matchmaking sessions**, **peer reviews**, or in webinars and online discussions, and provide expert advice through our on-demand **policy helpdesk service**.

## 2. Innovation Procurement: Benefits and Barriers

### Innovation procurement: benefits



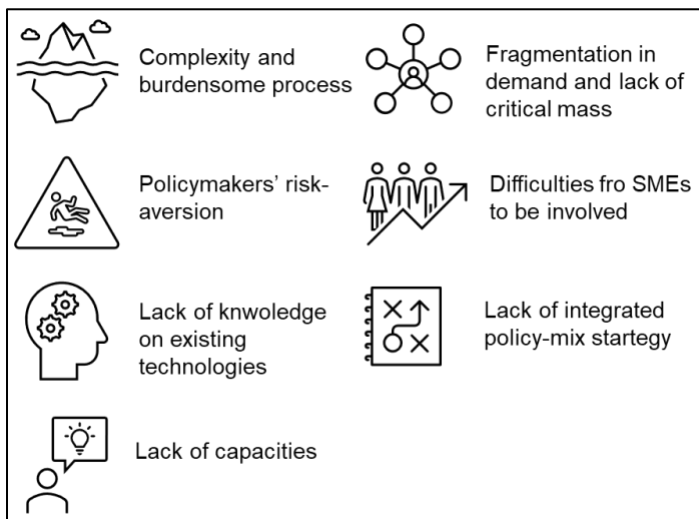
**Figure 2.** Innovation procurement: benefits. Source: the authors.

**Innovation procurement can offer many benefits for fostering regional research and innovation capacities.** The moment something new needs to be purchased, procurement could create a ‘lead customer’ or a ‘lead market’ for an innovative product/service/process ([Uyarra et al.](#)).

When delivering innovative processes and products, innovation procurement can promote the green and digital twin transitions (see for instance, the [action plan to increase green public procurements and green innovation in Norway](#) with [the procurement of electric ferries](#)), deliver high quality public services on an optimal budget, respond to unmet needs, create a market critical mass through interregional cooperation, or modernise public services. More relevant for supporting research and innovation capacities, innovation procurement can encourage innovation among established market players and more importantly give greater access to SMEs and start-ups thus enhancing their capabilities. Innovation procurement can move markets towards innovation by removing some uncertainties and enhancing greater private adoption (see the [Guidance on Innovation Procurement](#)). Innovation procurement can lead to a higher impact of innovation investments thanks to a comprehensive strategy that combines R&D investments (e.g. in eco-innovation) with purchasing innovations (e.g. of energy efficient and low carbon buildings or transport) and to higher mobilisation effect on private investors/venture capital, thanks to the faster market access and return-on-investment for innovative firms ([RIS3 Guide](#)). Finally, the process to develop innovation procurement can build administrative and institutional capacities in less-developed European regions ([Sánchez-Carreira et al.](#)).



### Innovation procurement: barriers



**Figure 3.** Innovation procurement: barriers.  
Source: the authors.

**There are many barriers that hinder the use of innovation procurement at the regional level.** The rules are perceived as complex and there are **burdensome administrative processes** that require for policymakers to have a broad range of procurement capabilities. Policymakers tend to have limited incentives and have **risk-averse attitudes** in developing demand-side innovation approaches stemming from a lack of political support due to uncertainties of the innovation process. There is a **lack of knowledge** of public procurers on what new technologies and innovations are available in the internal market or are possible and what could be the medium to long-term benefits and cost savings. There is a lack of capabilities of public procurers to manage procurement procedures or the purchasing criteria are skewed against innovation and focus solely on cost criteria. There is a **fragmentation in demand and a lack of critical mass** that often make investments not worthwhile for SMEs and start-ups. There are difficulties for innovative SMEs to become involved in public procurement as direct suppliers. Finally, innovation procurement must be part of an integrated policy-mix and not work in regional policy silos (see [RIS3 Guide](#)).

#### Box 2. Interreg Europe webinars on Public Procurement

The [Interreg Europe Policy Learning Platform](#) has organised three webinars on **public procurement**: on [new approaches to green public procurement](#), on [GovTech](#), and on [public procurement of innovation \(PPI\)](#). The webinars discussed:

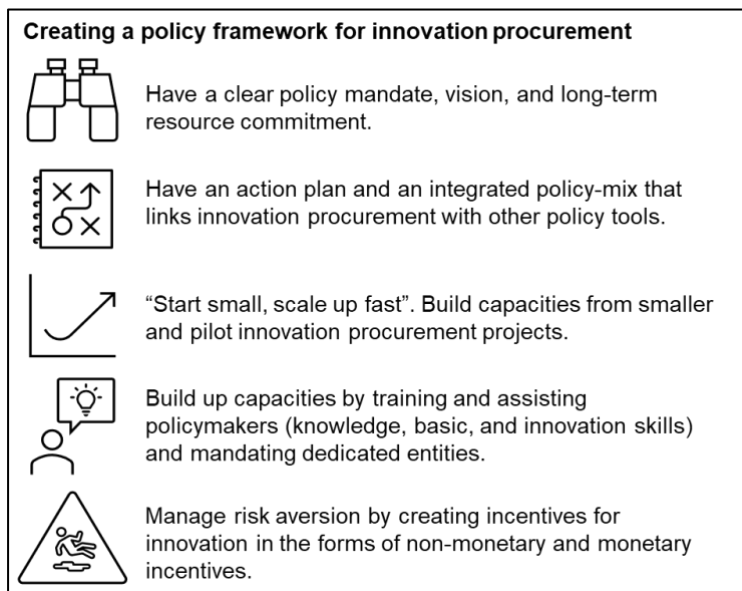
- The new [Circular Economy Action Plan \(CEAP\)](#) that recognises Green Public Procurement (GPP) as an excellent opportunity for national, regional and local governments to drive a shift towards more sustainable products and services.
- The concept of 'GovTech' that refers principally to the use of **emerging technologies and digital products and services by the government** procured or sourced from start-ups and SMEs—instead of relying on large system integrators (read [GovTech Practices in the EU](#) and [Scoping GovTech dynamics in the EU](#)).
- The role of [Public procurement of innovation \(PPI\)](#) as an important policy tool to respond to regional and societal challenges and help companies, especially SMEs launch new and innovative products and services.



### 3. EC Guidance on Innovation Procurement

The following section summarises the main recommendations from the **Guidance on Innovation Procurement** to support regional policymakers to better navigate innovation procurement practices.

#### Creating a policy framework for innovation procurement

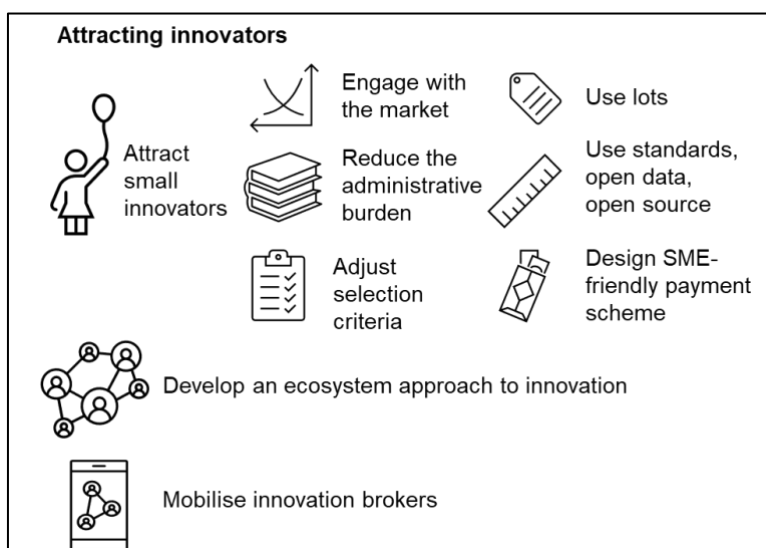


**Figure 4.** Creating a policy framework for innovation procurement  
Source: the authors

Policy makers must **strengthen the regional institutional capacity** by creating the right policy framework for innovation procurement. There must be a clear policy vision provided at political level to the institutions and to the policymakers involved in strategic procurement, with a clear mandate and resources to act (see policy recommendation 1). Innovation is a complex policy tool that requires many capabilities, thus regional policymakers must follow a step-by-step learning process. Innovation procurement can follow an action plan and must be integrated in the policy-mix. Innovation procurement requires many capabilities that need specialised training, often a dedicated entity, and an entrepreneurial culture (see policy recommendation 2).

Innovation procurement entails risks and thus overcoming risk aversion is a matter of changing the motivation for public buyers using a mix of financial and non-financial incentives.

#### Attracting innovators



**Figure 5.** Attracting innovators. Source: the authors.

Policy makers must find ways to **attract innovators, especially innovative SMEs and start-ups**, to maximise the impact of innovation procurement on their regional innovation ecosystems. Public buyers can attract SMEs and start-ups by communicating and engaging with them, or by reducing the administrative burden thanks to EU simplified rules and the **European Single Procurement Document (ESPD)**. Public buyers can adjust the selection criteria such as the financial requirements (often too high) that can exclude startups and SMEs to participate, they can use lots to match with the operational capacities of start-ups

and innovative SMEs. They can also use standards, open data, open interfaces, and open source software, and designing SME-friendly payment/cash flow schemes as SMEs need early and regular payments. The public buyer can develop an innovation ecosystem approach and work with relevant regional quadruple helix stakeholders to co-create solutions. Innovation brokers have an important role



to play in advising public buyers, attracting innovators' interests, and identifying promising innovative solutions. Indeed, within quadruple helix clusters, large companies will often pitch a technology challenge to innovative SMEs to try and find a solution and build a long-term partnership.

### Attracting innovation: innovation-friendly tools

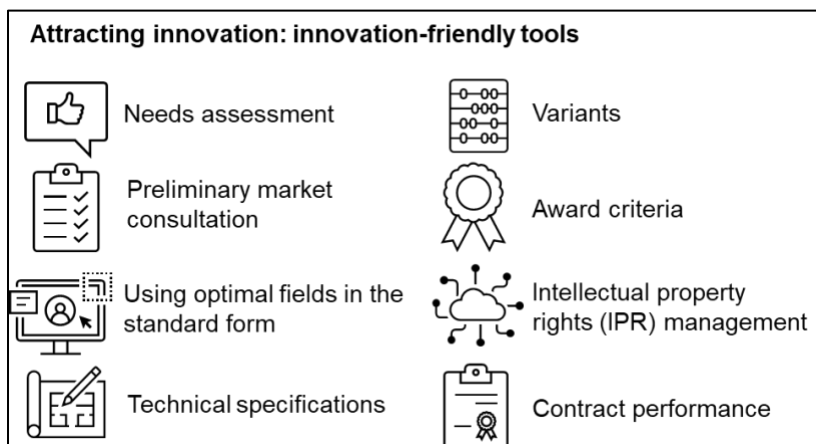


Figure 6. Attracting innovation: innovation-friendly tools. Source: the authors.

There are some tools that support the preparation and organisation of the procurement procedure in an innovation-friendly way. Public buyers can perform a wide-ranging needs assessment to define the problem to solve. Public buyers can perform preliminary market consultation to check the state of play before launching a procurement procedure (see policy recommendation 3). Public buyers will have to fill in **standard eForms form 25**

**October 2023**, allowing them to provide information on the use of innovation procurement. With appropriate market consultations, public buyers can draft technical specifications descriptively or functionally from the gained knowledge on possible parameters, special properties, and measurable indicators. Public buyers may allow tenders with “variants”: one or more alternative solutions usually based on alternative technologies or processes, can accompany the offer that closely matches the technical specifications. **Economically most advantageous tender (MEAT)** is the only award criterion mentioned in the directive. A smart setting of MEAT award criteria, rewarding both quality and price, represents an important potential for innovation procurement. Defining clear intellectual property rights (IPR) (e.g. patents or copyrights, design rights, trademarks) transfer clauses or not in the tender documents is thus important for all public procurements. Lastly, the contract terms reflect the relevant–innovation-friendly–aspects.

### Attracting innovation: innovation-friendly procurement procedures

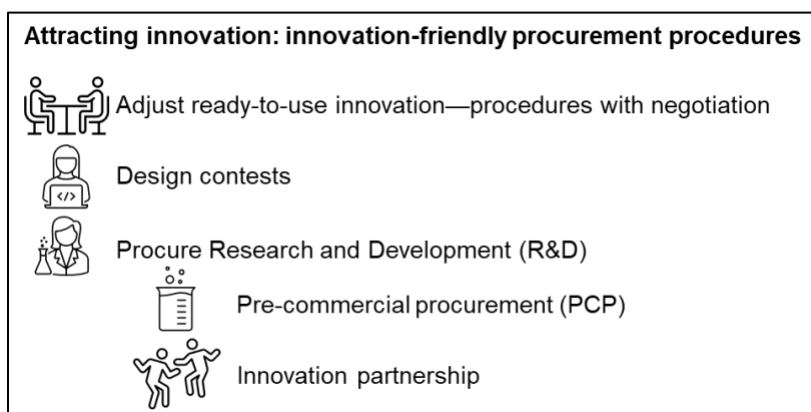


Figure 7. Attracting innovation: innovation-friendly procurement procedures. Source: the authors.

**Public buyers can use innovation-friendly procurement procedures such as negotiated procedures, design contests, and procure R&D.** The EU rules allow for the possibility to use a negotiated procedure for public contracts looking for adaptation of readily available solutions (including designs or innovative solutions) that are of particularly complex nature, or where technical specifications cannot be established with sufficient precision. In these circumstances, the EU rules give the public buyers a choice between two procedures: **competitive procedure with negotiation** and/or **competitive dialogue** where public buyers describe their needs in descriptive documents. Negotiated procedures require strong capabilities from the public buyers and proximity between the public buyers





and the industry. Another recommendation is to use design or challenge contests, which are similar to inducement prizes, and are organised in view of awarding prizes (with payments) or service contracts by means of a follow-up negotiated procedure without publication of a contract notice. The design contests allow for more flexibility to participants to provide solutions to respond to the needs described in the contest notice (see for instance, the [Tampere hackathons](#)).

**Public buyers can procure research and development services to develop a tailor-made innovative solution when no satisfactory solution exists** (see policy recommendation 4). The result of the research and development process can help to draft technical specifications for the procurement of the practical deployment of the innovative solution. In pre-commercial procurement (PCP), an important part of the technical specifications and the subsequent contract must be dedicated to the allocation of the intellectual property rights resulting from the research and development services. PCP offers an opportunity to public authorities to avoid public procurement directives for research and development services when the public buyer does not only reserve all the benefits from the research and development service contract exclusively to itself but also to the participating operators or under fair licensing.

**Pre-commercial procurement (PCP)** consists of procuring research and development services at advantageous conditions from several economic operators. For regional authorities, pre-commercial procurement (PCP) has two main purposes. First, PCP aims to support the procurement needs of regional authorities in **new services or products that do not exist** on the market or in the regions. The objective of PCP is thus to conduct path-breaking research to develop a prototype of a product or service. Second, PCP aims **to support the development of a product or service that will be used by the private sector**. Overall, pre-commercial procurement (PCP) offers regional authorities the opportunity to experiment with innovative procedures to find innovative solutions and then select a provider.

**The European Commission is encouraging the use of pre-commercial procurement (PCP) through diverse directives**, namely, [directive 2004/18/EC](#) and [directives 2014/23 to 25/EU](#). PCP must respect some conditions such as:

- **the scope must be limited to R&D services:** R&D can cover activities such as solution exploration and design, prototyping, up to the original development of a limited volume of first products or services in the form of a test series;
- **the risk-benefit must be shared with industry:** the public purchaser does not reserve the R&D results exclusively for its own use. Public authorities and industry must share risks and benefits of the R&D services needed to develop new innovative solutions that outperform those available on the market;
- **the PCP excludes State aid:** the PCP process must be designed to ensure competition, transparency, openness, fairness, and pricing at market conditions to identify the best possible solutions the market can offer ([European Commission, 2007](#)).

**Innovation Partnership** is a procedure that allows for the combination of research, innovation and procurement. It can be used only in cases where no solution for a public buyer's needs is available on the market. The main feature of the innovation partnership is that the innovation occurs during the performance of the contract. The innovation partnership process takes place in three phases:

- **The selection phase** occurs at the very beginning of the procedure.
- **In development phase** where the partner(s) develop(s) the new solution in collaboration with the public buyer.
- **The commercialisation phase.**

### State aid

**Public authorities must ensure that they do not grant State aid in ways that would be contrary to the EU State aid rules when awarding public contracts resulting from innovation procurement.**

Innovation procurement must follow a process that is competitive, transparent, non-discriminatory, and unconditional, in line with the relevant EU directives on public procurement. The tender should allow for the most economically advantageous offer to match the value of the market.

**Box 3. The Horizon Europe PROTECT project**

There are numerous Horizon 2020 and Europe projects that aim to find applied solutions to grand challenges using innovation procurement models. For instance, **PROTECT** aims at **levering innovation procurement to unlock the climate change service market's potential** and support urgent climate change adaptation and mitigation policies and efforts by public authorities.

Over a period of two years, **PROTECT** will prepare and equip a community of public procurers to undertake a **Pre-Commercial Procurement for end-user services based on Earth-Observation (EO) in the area of climate change adaptation and mitigation**, with a view to reducing the fragmentation of the public demand for EO-based climate services throughout Europe.

Ultimately, **PROTECT** shall enable public authorities to shift to a proactive and innovative governance model, using the PCP approach to increase value and climate impact for money. **PROTECT** shall also increase the access of climate service SME providers across Europe to public procurement markets and shape solutions that best address public demand, both specific and systemic.



## 4. Policy Recommendations

**This policy brief provides five policy recommendations**, from more general to more specific advice focusing on innovation procurement. They are illustrated with good practices coming from Interreg Europe partners. Many **Interreg Europe good practices feature the use of innovation procurement**, at local and regional level, and one specific project is fully dedicated to better designing and delivering innovation procurement policies: this project is **IBUY**, and several practices identified in this project are showcased in the following sections.

### Policy recommendation 1. To have a strategic policy vision for innovation procurement.

The first policy recommendation is for regional policymakers to **set a clear policy vision provided at the political level to the institutions and to provide the policymakers involved in strategic procurement with a clear mandate and resources to act**. The regional strategic potential of innovation procurement is important, especially in enabling regional structural changes, responding to societal challenges, and in supporting technological development in and by the public sector. Innovation procurement has many benefits but also barriers that require a cultural shift not only among the public buyers themselves, but also in the regional innovation ecosystem: among the economic operators, political authorities, auditors, and the academia. In this context, a clear policy statement is essential to address risk aversion and possible additional costs arising from blocking innovation. The policy vision must be integrated in the broader policy-mix and innovation procurement must be linked with other policy objectives.



#### Box 4. To have a strategic policy vision for innovation procurement.

In **IBUY**, the City of Tampere, Finland, has implemented a **strategic roadmap for public procurement of innovation**. The roadmap's objective is to reach a target of **10% of innovation procurement of all public procurement by 2020**. The roadmap includes a methodological approach for public procurers to adopt and promote the use of public procurement of innovation in Tampere's development plans. The good practice highlights the importance of capabilities to support innovation procurement and a potential way forward to promote innovation procurement at the city's level. Working groups and forums in public organisations are essential to implement the roadmap for innovation procurement. As pointed out in the good practice, the roadmap must have the following characteristics: it must be simple to adopt, co-created with public officials, implemented to change policymakers' culture, aligned with policy changes and strategic development, promote capacity-building and continuous policy improvements.

#### Recommendations from the Interreg Europe community

**Johanna Vannes**, from the Baltic Institute of Finland, advises that when preparing a roadmap for Innovative Public Procurement (IPP), make sure the directors understand that IPP is a great management tool, and the roadmap should be an integral part of development work. Procurers must get guidance and support for implementing IPP, and related pre- and in-service training is crucial. The roadmap helps in communicating your needs to the market and to potential cooperation partners. Moreover, IPP includes the very important aspect of sustainability, and the roadmap will guide the way to more responsible purchases, too.



## Policy recommendation 2. To promote capacity-building in the public sector.

The second policy recommendation is for **regional policymakers to promote capacity-building in the public sector**. Innovation procurement requires undertaking specific activities that require **time, money, expertise** — they cannot be improvised. To successfully engage in innovation procurement, a public buyer should tap into knowledge and skills that can be built through internal training and targeted recruitment, by relying on external experts and consultants or pooling expertise with other public buyers in other regions. This capacity-building for innovative public procurement must also target companies, especially start-ups and innovative SMEs. The different areas of expertise include:



- **Knowledge:**
  - market and stakeholders engagement
  - relevant products or services
- **Basic skills:**
  - relevant legal framework
  - designing tender calls
  - negotiation
  - contract management
- **Innovation specific skills:**
  - risk assessment
  - intellectual property rights (IPR) management
  - policy entrepreneurship

### Box 5. To promote capacity-building for innovation procurement

In **IBUY**, the **consultations regarding innovative public procurement** is a capacity-building programme to support the public and the private sectors to adopt pre-commercial procurement practices in Lithuania. The public and private sectors are offered capacity-building support programmes on the topics of how to and why implement pre-commercial procurement projects. The capacity-building support programmes are offered by experts of the Lithuanian Innovation Centre (LIC) and the Science, Innovation, and Technology Agency (MITA). The programme offers a possible path for policymakers to encourage the adoption of pre-commercial procurement practices.

**Pre-commercial procurement (PCP) requires regional authorities to develop an entrepreneurial mindset and to be less risk-averse for demand-side innovation policies.** Indeed, risk-aversion in the private and public sectors towards new policy tools can hinder the adoption of those new policy tools. **The pre-commercial procurement (PCP) support scheme** is a national programme in Lithuania **to encourage public institutions to adopt a pre-commercial procurement mindset by reducing risks.** The programme provides funding up to 85% of the PCP with the remaining 15% to be financed by the contracting authority. The programme can support pre-commercial procurement at different stages from the proof-of-concept to the creation of a prototype and functioning pilot system.

#### Recommendations from the Interreg Europe community

**Justė Rakštyte-Hoimian**, from the Lithuanian Innovation Center, highlights that a PCP support scheme can be a useful tool for regions looking to stimulate the development of new technologies and innovations. As the rationale for it is to stimulate innovation in areas of pressing societal needs for which government action can complement market mechanisms, it is essential to align the support scheme with the smart specialisation strategy (S4) of the region and to ensure that the scheme is targeted and effective in addressing the needs of the region. S4 should also be the basis for developing a clear and well-defined scope for the PCP scheme, including the types of technologies or innovations that will be supported, the target market, and any other relevant criteria. In addition, engaging with potential participants in the PCP scheme early on is essential to ensure that there is strong interest and support for it. Partnering with other organisations or institutions might help support the PCP scheme and maximise its impact.



### Policy recommendation 3. To use preliminary market consultation.

The third policy recommendation is for **regional policymakers to use preliminary market consultation** to check the state of the art before launching an innovation procurement procedure. To prepare for innovation procurement, the public buyer must gain better insight into the relevant market and can communicate with potential suppliers prior to market consultations. The public buyer can gather information, in particular on price structure and market capabilities. A proper preliminary market consultation can help overcome a recurring problem observed in the application of procurement rules, i.e. non-realistic or outdated specifications. Preliminary market consultation will enable the public buyer to:



- find creative ideas from the market,
- define the conditions for solving the problem,
- create opportunities for market parties to work with each other and with public buyers,
- measuring the ability of the organisation to take on the risk of innovation.

#### Box 6. To use prior market consultation

In **IBUY**, in Ventspils, Latvia, the **prior market consultation** is an activity performed prior to the launch of a call for public procurement to screen existing regional capacities to respond to the requirements of the calls. In Latvia, the public procurement aimed to develop an electric 16-seats minibus with a fast-charging infrastructure solution. The prior market consultation was performed to gather market research, to find potential market opportunities, and to analyse the market readiness to develop such minibuses. The prior market consultation allows regional private companies to prepare for the call for public procurement by identifying extra-regional partners with the technological capacities to respond to some of the specifications of the call.

This practice was featured in [EURegionsWeek](#). On 14 October 2020, the **Interreg Europe Policy Learning Platform** organised a session on **E-buses: From procurement to deployment** for the 18<sup>th</sup> European Week of Regions and Cities. The discussion revealed many insights for other cities and regions aiming to support the transition to sustainable mobility such as the importance of political commitment, performing initial market assessment, and taking a system perspective...[\(read the key takeaways here\)](#). E-mobility will be central in the next EU programming period 2021-2027 with many opportunities, especially in the context of the European Green Deal.



#### Policy recommendation 4. To promote pre-commercial procurement (PCP).

The fourth policy recommendation is for regional policymakers to promote **pre-commercial procurement (PCP)**. **Pre-commercial procurement (PCP)** consists of procuring research and development services at advantageous conditions from several economic operators. PCP requires regional authorities to develop an entrepreneurial mindset and to be less risk-averse to developing demand-side innovation policies (see box 5). PCP is, to some extent, a more flexible and less-resource intensive policy tool compared to public procurement of innovation (PPI). PCP can be used to experiment with new policy approaches, strengthen regional scientific and technological capacities, and help to draft technical specifications for the innovation procurement of the practical deployment of the innovative solution. PCP can also be used by a group of regions with shared challenges thus creating a larger and more attractive market proposition for businesses.



#### Box 7. Pre-commercial procurement for the health sector

In **TITTAN**, the **PRIS** is a programme to boost the pre-commercialisation of research results from the Galician Public Health System. Ultimately, it aims to accelerate the commercialisation of research projects with potential market applications. The programme PRIS includes four phases: (1) the research projects pre-screening, (2) the evaluation from external experts, (3) the development of a business plan, and (4) the co-financing with public procurement to carry out the plan. The programme offers a possible path forward for research results to move up in their Technology Readiness Levels (TRLs) from 3 to 7, that is, from applied research to pre-commercial scale.

In **IBUY**, the region of Andalusia, Spain, has used **pre-commercial procurement (PCP) in the health sector**. The PCP aimed at developing a surgical robot prototype for minimal invasive abdominal, cardiac, thoracic, paediatric, and gynaecological surgeries. The leadership came from the University of Córdoba and the regional government and involved collaboration among academics, health practitioners, health services, and research and development (R&D) actors. The good practice highlights the importance to involve users, surgeons, and health professionals and of communication and coordination to ensure efficient collaboration among different stakeholders.



### Policy recommendation 5. To promote innovation procurement as a transformative policy tool.

The fifth policy recommendation is for regional policymakers **to promote innovation procurement as a transformative policy tool**. The region of Galicia, Spain, has used innovation procurement in a strategic manner to promote transformative changes. Indeed, 40% of the total investment in innovation procurement in Spain was done in Galicia (€112 M) between 2007 and 2014 ([Sánchez-Carreira et al.](#)). Galicia was also one of the first Spanish regions to introduce specific legislation to support innovation procurement. The region of Galicia has used innovation procurement to build capacities in the health sector (see box 6) and to support the creation of new development paths in the drone or Unmanned Aerial Vehicles (UAVs) industry (for good practices related to Unmanned Aerial Systems and drones have a look at Interreg Europe project [AERIAL UPTAKE](#)).



**The UAV initiative** used prior-market consultations to prepare the calls and inform potential beneficiaries about the goals targeted and specific requirements, and an early demand mapping to signal demand needs. The innovation procurement included a PCP and a PPI with the aim that Galicia could be a testing ground for the development of UAV solutions for sustainable land management. The definition of these complex challenges required extensive cross-departmental consultation and dialogue before being put to the market led by GAIN. The UAV initiative illustrates how innovation procurement can be used to enable regional structural changes and create new regional industrial path development (see [Uyarra and Flanagan](#)).

#### Box 8. To promote innovation procurement as a transformative industrial policy tool.

In **STEPHANIE**, the **Civil UAVs Initiative (CUI)** is a public procurement programme launched in 2015 by the Region of Galicia to create a technological R&D pole and promote the aerospace sector in the civil field. Public Procurement is the main tool used in the CUI initiative to promote innovation in the provision of public services. The field of Unmanned Aerial Vehicles (UAVs) could provide innovative solutions in various public sectors, such as land/aquatic resources management, cultural and natural heritage, tourism, emergencies and early detection of terrorist or vandalism actions. The innovation procurement has been structured in 3 main phases: Pre-Commercial Procurement (PCP), Public Market Consultation, Public Procurement of Innovation (PPI), with the aim to identify strategic partners, solutions, technologies, and market trends. The Government of Spain awarded the initiative with the National Prize of Innovation in 2016.

#### Recommendations from the Interreg Europe community

**Manuel París Lestón**, Galician Innovation Agency, points out that Galicia, Spain, has identified the need for transformation of some regional industrial value chains. In line with sustainable and innovative development and linking it to future-oriented manufacturing potential sectors, such as aerospace. Public authorities in the region have had a role in promoting this transformation and have led the Civil UAVs Initiative, which aims to attract investment and stimulate the regional industrial ecosystem to produce innovative solutions in the field of unmanned vehicles and systems industry. It has made use of the advantages of the Public Procurement for Innovative Solutions and constitutes a good example of how it can facilitate the development of an emerging innovation-based high-tech sector, while solving the need to improving the effectiveness and efficiency of public services managed by the regional administration, and acting also as a lead customer to promote the arrival of the developed solutions to the market.



### Sources of further information on innovation procurement

- AFORI Knowledge hub for innovation procurement - [AFORI](#)
- Dutch National Biobased Products Procurement Database - [Biobased Inkopen](#)
- European Commission – [Guidance on Innovation Procurement](#)
- European Commission – [Pre-commercial Procurement](#)
- European Commission - [The Strategic Use of Innovation Procurement in the Digital Economy](#)
- European Commission - [The Public Procurement Gazette](#)
- European Assistance for Innovation procurement – [Toolkit on Innovation Procurement](#)
- H2020 Project – [Innovation Procurement Platform](#)
- H2020 Project – [Procure2Innovate](#)
- Horizon Europe – [PROTECT-Procuring Innovative Climate Change Services](#)
- Horizon Europe – [PCP HORIZON Pre-commercial Procurement](#)
- ICLEI - Local Governments for Sustainability – [Sustainable Procurement Platform](#)
- Interreg Europe Policy Brief – [Clusters](#)
- Interreg Europe Policy Brief – [Open, Social, and Responsible Innovation](#)
- Interreg Europe Policy Brief – [Green public procurement in improving resource efficiency](#)
- Interreg Europe Policy Brief – [University-Industry Collaboration](#)
- OECD – [Public Procurement Toolbox](#)
- OECD – [Public Procurement of Innovation](#)
- OECD – [Recommendations of the Council on Public Procurement](#)

If you have any additional policy questions regarding innovation procurement, do not hesitate to contact us through our on-demand [policy helpdesk service](#). If you would like to explore the policy challenge of innovation procurement in your region in more detail, you can consider a Policy Learning Platform [peer review](#) or [matchmaking](#).

### Annex 1: Selection of relevant Interreg Europe projects dealing with innovation procurement

Project	Objective
AERIAL UPTAKE	To foster the uptake of innovative Unmanned Aerial Systems
CIRCPRO	To promote smart circular procurement
GPP4GROWTH	To support green public procurement for resource-efficient regional growth
HELIUM	To promote innovation in healthcare
IBUY	To better design and deliver regional innovation procurement
LCA4REGIONS	To foster improved environment and resource efficiency through use of life cycle instruments for the implementation of regional policies
MANUMIX	To support innovation policy-mix learning for advanced manufacturing
STEPHANIE	To promote space technologies based on photonics
TITTAN	To encourage innovation for healthy ageing

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