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AN OVERVIEW OF INNOVATIVE PROCUREMENT

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1. INTRODUCTION

Recent documents on public procurement by the Organization for Economic Co-operation and Development (OECD) and the European Union confirm the growing consensus on the role of public procurement in addressing social challenges, improving

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productivity, creating job opportunities and ensuring value for money.[2] Public procurers are becoming more concerned not only with "how to buy" – promoting aggregation in public procurement– but also with "what to buy."[3] They have started to spend taxpayers' money beyond the mere satisfaction of their primary needs.[4] As a result, innovation becomes fundamental in ensuring that the procured solutions provide an added value in terms of quality, cost-efficiency, and environmental and social impact.[5] According to the Oslo Manual (OECD, 2005) innovation is defined as "*the implementation of a new or significantly improved product or process; a new marketing method; a new organizational method in business practices, in workplace organization and/or external relations. As such, innovation can occur in any sector of the economy, including government services*".[6] To be innovative, any work, product, service or process must either have a significant added value (in terms of increased social wellbeing or value for money); to be present on the market for less than two years and in small commercial volumes; or have used old technologies in new

[2] OECD, *Public Procurement for Innovation: Good Practices and Strategies*, in *OECD Public Governance Reviews*, OECD Publishing, Paris, 2017, available at: *https://read.oecd-ilibrary.org/governance/public-procurement-for-innovation_9789264265820-en#*, 1.

[3] P. VALCARCEL FERNANDEZ, *The relevance of promoting collaborative and joint cross border public procurement for buying innovative solutions*, in *Ius Publicum Network Review*, 1/2017, 1 ff.; S. PONZIO, *Joint Procurement and Innovation in the new EU Directive and in some EU-funded projects*, in *Ius Publicum Nework Review*, 1/2014, 1 ff. G. M. RACCA– S. PONZIO, *Nuovi modelli organizzativi per il joint procurement e l'innovazione dei contratti pubblici in Europa*, in R. F. ACEVEDO – P. VALCARCEL FERNANDEZ (eds. by) *Compra Pública Agregada*, 2016, 373-406.

[4] EU Commission, *Guidance on Innovation Procurement*, Brussels, 15.5.2018.

[5] *Ibidem.*

[6] OECD, *Oslo Manual*, 2005, available at *https://www.oecd.org/sti/inno/2367580.pdf.* See also infra par. 3: Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC, Art. 2 (22).

or novel ways.[7] This article focuses on innovation procurement in the European Union and on the role of public procurers in providing new solutions through a *demand-side* approach using pre-commercial procurement (PCP) and public procurement of innovative solutions (PPI). The first part of the article looks at public expenditure in the EU and the role of innovation in public procurement in ensuring more effective public services to citizens and in achieving economies of scale and other important policy goals. Thereafter, this article analyses the increasing importance of a *demand-driven* approach to public procurement according to the EU policies. As a matter of fact, public authorities had to bear a double effort: to sustain and incentivize the innovative process as well as to help innovation to have access to the market. In this context, a synthesis on the main distinctions between buying standard products and/or services and purchasing innovation (both in terms of product or process) through either PCP or PPI will be provided. A thorough analysis of the policy and legal framework on innovation procurement in the EU concentrates on the most significant provisions under the 2014 EU public procurement directives on innovation procurement. [8]

2. THE ROLE OF PUBLIC PROCUREMENT AS A DRIVER OF INNOVATION

The overall expenditures by local and national governmental authorities for works, goods, and services represent 13.1% of European GDP, amounting at EUR 3 billion in

[7] OECD, *The Innovation Imperative*, 2015, available at: *https://www.oecd.org/publications/the-innovation-imperative-9789264239814-en.htm*.

[8] In particular, the countries that participated in PPI2Innovate (*Capacity Building to Boost the usage of PPI in Central Europe*) project, a project funded by INTERREG covering six Member States from Central Europe, and namely Croatia, the Czech Republic, Hungary, Italy, Poland and Slovenia. For more information on the project, it is possible to look at the website: *https://www.interreg-central.eu/Content.Node/PPI2Innovate.html*.

2015.[9] The massive buying power in public procurement has significant impact on economic growth, jobs creation, competitiveness and the overall social well-being. In order to make this impact more effective, public authorities should cease to see procurement as a mere administrative and financial task. They must start to look at it as a strategic tool for purchasing not only the standard and off-the-shelf products, but rather what is more important, innovative goods and services with a view to promoting broader policy objectives.

Innovation is a key factor in addressing contemporary societal challenges.[10] It establishes clear linkages between purchases by the public sector and significant policy objectives such as reducing the environmental footprint, increasing energy efficiency, addressing climate change, promoting sustainable healthcare for the ageing population, facilitating the access of start-ups and SMEs to the market, reducing life-cycle costs, modernizing public service delivery, etc.[11] Nonetheless, innovation procurement is still a niche practice in Europe. Organisational issues and the lack of practical and theoretical expertise by procurers result in a certain degree of risk-aversion and resistance to change,[12]

[9] EU Commission, *Public Procurement Indicators 2015*, available at: *http://ec.europa.eu/DocsRoom/documents/20679/attachments/1/translations/en/renditions/native*.

[10] Directive No. 2014/24/EU, *op. cit.*, wh. 47: Research and innovation, including eco-innovation and social innovation, are among the main drivers of future growth and have been put at the centre of the Europe 2020 strategy for smart, sustainable and inclusive growth. Public authorities should make the best strategic use of public procurement to spur innovation. Buying innovative products, works and services plays a key role in improving the efficiency and quality of public services while addressing major societal challenges. It contributes to achieving best value for public money as well as wider economic, environmental and societal benefits in terms of generating new ideas, translating them into innovative products and services and thus promoting sustainable economic growth. Cfr. M. CERUTI, *Sustainable Development and Smart Technological Innovation within PPPs: The Strategic Use of Public Procurement*, in *EPPPL*, 12, 2017, 183. I. ZAPATRINA, *Sustainable Development Goals for Developing Economies and Public-Private Partnership*, in *EPPPL*, 11, 2016, 39.

[11] EU Commission, *Guidance on Innovation Procurement*, 2018, 15.5.2018.

[12] *Ibidem.*

as well as poor management of the citizens' money,[13] and are some of the reasons why mainstreaming innovative procurement across the Europe remains a challenge.

For this reason, the European Union (EU) and its Member States are creating an innovation-friendly environment for public procurement by establishing a set of policies on innovation, including legal and financial measures. They are implementing new measures to address the societal challenges and needs through innovative solutions that already exist in the market in small-scale volumes (Public Procurement of Innovative Solutions, PPI) or the development of state-of-the-art products during the R&D phase (Pre-commercial procurement, PCP). During the last ten years the EU policy framework hassubstantially supported the demand-side approach in upscaling innovative procurement across Europe.

PPC and PPI encourages public purchaser in "driving" innovative economic operators. In this context, public administrations require to the market the development specific products and services, following a careful internal analysis for the identification of a specific need. In this sense, procurement of innovation includes a set of demand-side policies (differently from those policies aimed at promoting the offer of innovation) that promote innovation in an instrumental way pursuing the optimization of public services on the basis of a preliminary need analysis. Such a new perspective requires a careful analysis of the entire public procurement cycle, from the definition of the needs until the execution phase. Demand-side approaches, in particular throught efficient strategies in public procurement[14], have an added value since it is the same contracting authority that identifies

[13] OECD, *Public Procurement for Innovation: Good Practices and Strategies*, in *OECD Public Governance Reviews*, 2017, *supra* n.1.

[14] COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, *Making Public Procurement work in and for Europe*, Strasbourg, 3.10.2017, COM(2017) 572 final. S. Bedin, Intervention in the Master in Strategie per l'efficienza, l'integrità e l'innovazione nei contratti pubblici, Turin, 2018. R. CAVALLO PERIN - G. M. RACCA, *La cooperazione amministrativa europea nei contratti e nei servizi pubblici*, in *Rivista Italiana di Diritto Pubblico Comunitario*, 2016, 1464R. CAVALLO PERIN and G. M. RACCA,

its own actual and effective innovation needs, favouring investments of the economics operators in order to address the challenges identified by public authorities.

An effective innovation procurement that does not limit its impact to a mere support to the undertakings shall begin with a perspective analysis – within the contracting authorites – on their needs, in the light of strategic objectives for the improvement of its performances for the benefit of citizens and final users of services. In assessing its needs, internal processes and services, the public purchasers shall not be influenced by proposals or suggestions coming from the undertakings, that have to be involved – in the phase known as "dialogue with the market" or "market consultation" – in order not to incur in the violation of EU rules and principles on competition[15].

Furthermore, a procurement that is conducted by a single contracting authority implies higher costs and a scarcer attention by economic operators: aggregation, also with a central role entrusted to a single administration, reduces the risks of deserted or poor-quality tenders. It is nevertheless necessary to favour a greater participation by SMEs through the overcoming of barriers, such as high qualification and selection requirements or the need to show a track record, an aspect that is often difficult for innovation procurement.

Plurality and Diversity of Integration Models: *The Italian Unification of 1865 and the European Union Ongoing Integration Process*, in in D. SORACE and L. FERRARA (eds.), *The Changing Administrative Law*, Giappichelli, Springer, forthcoming.

[15] G. M. RACCA - S. PONZIO, *La nuova disciplina sui contratti pubblici e il contrasto alla corruzione*, in L. Scomparin (a cura di) *Corruzione e infiltrazioni criminali negli appalti pubblici. Strumenti di prevenzione e contrasto*, Torino, 2017, 109-144, in part. phar. 3.

3. DEMAND-DRIVEN APPROACHES TO PUBLIC PROCUREMENT IN THE EU POLICY FRAMEWORK

The European Commission acknowledged the many challenges in using a supply-side approach to innovation (i.e., the earlier approach of subsidising the private sector), and from 2007 onwards decided to promote innovation from the demand side despite the difficulties in doing so. The funding of undertakings and enterprises for the development and commercialization of innovative products and services has led to the infringement of EU rules on state aid.[16] Indeed, there were reported cases where the financial support by public authorities had distorted competition in specific relevant markets. To address this issue, public procurers have to implement demand-side policies by developing an in-depth needs identification process within their respective organizations. Moreover, the 2014 Framework on State Aid for research and development and innovation provided the requirements for this type of aid, which states in part, "*the Commission will consider that no State aid is awarded to undertakings where the price paid for the relevant services fully*

[16] Art. 107 of the Treaty on the Functioning of the European Union: 1. Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market. 2. The following shall be compatible with the internal market: (a) aid having a social character, granted to individual consumers, provided that such aid is granted without discrimination related to the origin of the products concerned; (b) aid to make good the damage caused by natural disasters or exceptional occurrences; (c) aid granted to the economy of certain areas of the Federal Republic of Germany affected by the division of Germany, in so far as such aid is required in order to compensate for the economic disadvantages caused by that division. Five years after the entry into force of the Treaty of Lisbon, the Council, acting on a proposal from the Commission, may adopt a decision repealing this point. 3. The following may be considered to be compatible with the internal market: (a) aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment, and of the regions referred to in Article 349, in view of their structural, economic and social situation; (b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State; (c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest; (d) aid to promote culture and heritage conservation where such aid does not affect trading conditions and competition in the Union to an extent that is contrary to the common interest; (e) such other categories of aid as may be specified by decision of the Council on a proposal from the Commission. D. C. DRAGOS – B. RACOLȚA, *Comparing Legal Instruments for R&D&I: State Aid and Public Procurement*, in *EPPPL*, 12, 2017, 408.

reflects the market value of the benefits received by the public purchaser and the risks taken by the participating providers."[17]

The EU Commission Communication 799 (2007) on PCP set down at least two conditions that have to be met in order to identify state aid when paying for innovation. First, the risk-benefit sharing between the public authority and the economic operator shall not take place under market conditions, and, second, the price paid for the provided services shall be higher than the market price.[18] Accordingly, these payments must be *"assessed by the Commission according to Articles 107-108 TFEU and the State Aid Framework for Research and Development and Innovation.*"[19]

Contracting authorities can drive innovation from the demand side through a strategic and timely planning of the procurement process on the basis of their needs, promoting innovation in a functional way, which can ensure a high quality of public services for the citizens. They must also consider both the short and long-term benefits of the proposed innovation by facilitating cooperation among different actors that will create economic and social wealth while encouraging industry to invest in new skills, equipment and R&D activities.[20] More specifically, governmental authorities must ensure the efficient alignment between their long-term visions and short-term actions in accordance with the twelve principles in the OECD Recommendations on Public Procurement (i.e.,

[17] EU Commission, *Communication of the Commission on State Aid Framework for Research and Development and Innovation*, C(2014)3282, 21.5.2014, available at: *http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52014XC0627(01)&from=EN*.

[18] EU Commission, *Pre-commercial Procurement: Driving innovation to ensure sustainable high-quality public services in Europe*, available at: *http://ec.europa.eu/invest-in-research/pdf/download_en/com_2007_799.pdf*.

[19] *Ibidem.* See: D. C. DRAGOS – B. RACOLȚA, *Comparing Legal Instruments for R&D&I: State Aid and Public Procurement*, in *EPPPL*, 12, 2017, 408. S. BEDIN, *HT.618 Consultation on the draft R&D&I-Framework*, 2014.

[20] OECD, *Public Procurement for Innovation: Good Practices and Strategies*, in *OECD Public Governance Reviews*, 2017, *supra* n.1.

transparency, integrity, access, balance, participation, efficiency, e-procurement, capacity, evaluation, risk-management, accountability, and integration).[21] Interestingly, some of these recommendations play an even greater role in innovation procurement.

Nevertheless, a balanced approach in their implementation is required insofar as policy objectives and specific procurement needs are to meet in a coherent way in order to achieve best value procurement. From this perspective, the EU Commission supports products and services capable of responding to actual demand of the public sector, favouring the "creation of the market" to satisfy the specific needs of public administrations.

Contracting authorities are likewise encouraged to guarantee, while ensuring competition and transparency, broader access for SMEs – even at the cross-border and transnational levels – which are usually characterized by their greater innovation potential. In this vein contracting authorities are encouraged to strategic procurement[22] and to "divide large contracts into lots", possibly accompanied by a maximum number of lots that can be awarded to each bidder. Lots strategies included in famework agreements can be developed on a quantitative basis or on a qualitative basis, evaluating also targets of innovation.[23]

[21] OECD, *OECD Recommendation of the Council on Public Procurement*, OECD Publishing, Paris, 2015.

[22] COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, *Making Public Procurement work in and for Europe*, Strasbourg, 3.10.2017, COM(2017) 572 final.

[23] G. M. RACCA – S. PONZIO, *La scelta del contraente come funzione pubblica: in modelli organizzativi per l'aggregazione dei contratti pubblici*, in *Dir. Amm*., 2019, forthcoming; C. NICHOLAS – A. CAROLINE MÜLLER, *SME Participation in Government Procurement Markets. Legal and Policy Considerations under the WTO Agreement on Government Procurement and the UNCITRAL Model Law on Public Procurement*, in T. RENSMANN (eds. by), *Small and Medium-Sized Enterprises in International Economic Law*, Oxford University Press, 2017, 123 – 161; cfr. B. RAGANELLI, *PMI, Procurement e favor partecipationis*, in *Rivista italiana di Diritto Pubbl. Co*m., f. 3-4, 2007, 839 ss

To develop an accurate needs identification and assessment process, contracting authorities must also ensure that all stakeholders and end-users participate in the procurement cycle in accordance with the bottom-up approach, so that undertakings are encouraged to invest in R&D activities. This strategy could usefully be combined with a top-down approach (structured in thematic threads that have been pre-defined by the Commission), which is enhanced by the Europe2020 strategy, and may actually be used in a complementary way (possibly, in the future, through open calls making the process of needs analysis even more free and authentic). As a matter of fact, dialogue and understanding with qualified stakeholders (such as citizens, final users, providers of the service, etc.) are irreplaceable tools to identify an actual need.

Moreover, contracting authorities must address the perennial need to professionalize the procurement practice by providing quantitative and qualitative criteria for selecting procurement professionals. Professionalization in public procurement breaks the vicious cycle of lack of capacity which results too often in pronounced risk-aversion.[24]

To validly assess the impact of innovate procurement, it is fundamental to develop indicators and benchmarks for a comprehensive evaluation, such as the use of risk-management techniques at every step within the procurement cycle. Digitalization of procurement procedures also helps in increasing access, competition, and innovation in public procurement.[25] When successfully carried out, innovation procurement ensures the

[24] See R. CAVALLO PERIN – G. M. RACCA, *European Cross-border Procurement and Innovation*, in G. M. Racca, C. R. Yukins, *Joint Public Procurement and Innovation. Lesson Across Border*, *forthcoming*See also: PETER T. MCKEEN, *The importance of a professionally educated public procurement workforce: lessons learned from the U.S. experience*, in G. M. Racca, C. R. Yukins (eds by) *Integrity and Efficiency in Sustainable Public Contracts. Balancing Corruption Concerns in Public Procurement Internationally*, Bruxelles, 2014.

[25] See M. PIGNATTI, *Electronic tools to foster buying innovation*, in G. M. Racca, C. R. Yukins, *Joint Public Procurement and Innovation. Lesson Across Border*, *forthcoming;* S. PONZIO, *Joint Procurement and Innovation in the new EU Directive and in some EU-funded projects*, *op. cit.*, 10.

optimum combination of higher quality, faster delivery and/or reduced life-cycle costs while opening more opportunities for innovative suppliers in public procurement market that will eventually foster their economic and industrial growth.[26]

As already said, the European Union promotes a *demand-driven* innovation in public procurement through both PCP and PPI. If innovation constitutes the strategic objective of the public procurers, PCP and PPI represent two possible approaches in the procurement process. PCP and PPI may be used independently (i.e., PCP and PPI are two distinct approaches to innovative procurement), or when the public authority decides to buy the outcomes of an R&D activity (such as in cases when a PPI follows a previous PCP) they might be applied in a complementary way.

PCP is designed to steer the development of innovative solutions to a particular public sector need[27]. In practice, PCP is not used for the procurement of already existing products or services. Instead, PCP explores the possible design for alternative solutions through either prototyping or developing a limited volume of products that are identified as one of the best possible outcomes. Finally, PCP should serve to experiment and encourage new entrepreneurial activities, also through the aggregation of different players on the relevant market. The R&D activities carried out in the framework of a PCP also need a correct economic dimension, so to avoid the phenomenon of unsuccessful or deserted tenders.

The PCP approach doesn't imply an obligation to results; it is rather related to an obligation of means aiming to develop a diligent performance of an R&D activity, thus allowing the contracting authority to compare different solutions on the basis of predefined indicators and objectives that must be adequately described to safeguard competition in

[26] EU Commission, *Guidance on Innovation Procurement*, 2018, *supra* n. 2.

[27] Directive 2014/24/EU, Art. 47.

each phase of the tender.[28] This approach is characterised by risk-benefit sharing according to market conditions, competitive development in phases, separation between R&D, and final commercialisation of end-products. PCP that operates completely outside the market is mainly concerned with the previous R&D phase.

In the case of successful R&D activities, the contracting authorities may confirm (or not) the idea of investing in a commercial phase by means of another open tender that re-opens the competition to those undertakings that did not take part to the PCP process, but that could have developed more effective solutions and a more efficient allocation of taxpayers' money.

In this context, central purchasing bodies (CPBs) might play a key role in promoting the development of contracting authorities' networks and providing their expertise as well for complex operations such as the monitoring of R&D procurements.

PPI, on the other hand, is an innovative approach in public procurement where contracting authorities act as launch customers (also called early adopters or first buyers) of innovative goods, works or services, which are near to the market or already available on a small-scale commercial basis. In a PPI project, procurers announce in advance their intention to buy a significant volume of innovative solutions in order to prompt industry to bring to the market their proposed solutions with desired quality/price ratios within a specific period. PPI also provides economic operators the opportunity to test their new solutions under real-life conditions.[29] Unlike PPI, PCP does not fall within the scope of EU public procurement law, but respects the general principles of transparency, equal access and fair competition.

[28] See: EU Commission, *Pre-commercial Procurement: Driving innovation to ensure sustainable high-quality public services in Europe*, Brussels, *op. cit.*

[29] *Ibidem;* See also: F. CLERMONT – F. FIONDA, *A Modern Approach for Procuring Research and Innovation: The Pre-Commercial Public Procurement*, in *European Procurement & Public Private Partnership Law Review*, in *EPPPL*, 11, 2016, 88. S. BEDIN, *HT.618 Consultation on the draft R&D&I-Framework*, 2014.

R&D and innovation procurement procedures are, therefore, different and divided. An exception is represented by the Innovation Partnership.[30] This procedure combines the R&D activity with the commitment, since the beginning, to purchase the best solution emerging from the development activities[31].

The most suitable financial opportunities for innovation procurement are the European Structural and Investment Funds (ESIF) and the Horizon 2020 programme. In particular, Horizon 2020 finances both PCP and PPI projects that are cross-border in nature. It is an action implementing the Innovation Union, which is one of Europe 2020 flagship initiatives for securing European global competitiveness by boosting excellence in science, strengthening industrial leadership and addressing societal challenges. Its intention is to ensure the proper coordination and support actions (both in the preparation and execution phase) among EU State Members by bringing together procurers from different countries in identifying the grounds for possible collaboration (up to 90% for PCP and 35% for PPI).

4. THE CHALLENGES OF PUBLIC PROCUREMENT OF INNOVATION.

PPI is fully regulated by the provisions of the EU Public Procurement Directives.

[30] Implemented in Italy by means of Art. 65 of legislative decree 50/2016, known as the new public contracts code.

[31] See below. C. Krönke, *Innovation partnerships: purpose, scope of application and key elements of a new instrument of strategic procurement, in Ius Publicum Nework Review*, 2/2018, 1 ff. For an overwiew in US see: C. Santerre – Funderburg; C. R. Yukins, *The U.S. Small Businnes Innovation Research (SBIR) Program: A comparative Assessment*, in G. M. Racca, C. R. Yukins, *Joint Public Procurement and Innovation. Lesson Across Border, forthcoming*.

European institutions support innovation procurement through dedicated funding schemes and established an innovation-friendly legal framework.[32]

Nonetheless, the most important step for the creation of an EU innovation-friendly legal environment is the adoption of the last public procurement directive (2014/24/EU). That Directive has modernized public procurement by adjusting the legal framework to the needs of public buyers and economic operators on the basis of the most recent technological developments, economic trends, and as a consequence of the increasing societal focus on sustainable public spending.[33] New rules for fostering the aggregation of public procurement of goods, services and work as well as the innovation in public procurement, including through IT tools, have been provided.

Article 2, par. 22 of the 2014/24/EU Directive defines innovation as "*the implementation of a new or significantly improved product, service or process, including but not limited to production, building or construction processes, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations inter alia with the purpose of helping to solve societal challenges or to support the Europe 2020 strategy for smart, sustainable and inclusive growth.*"[34] Because of its fundamental role in enhancing innovation, PPI is strongly supported at the European level. Nevertheless, this implies the development of a new professionalism in public procurement and a new openness to different forms of cooperation among contracting authorities (in

[32] EU Commission - DG Growth, *Study on strategic use of public* procurement, 2016.

[33] EU Commission, *Guidance on Innovation Procurement*, 2018, *supra* n.2.

[34] An important project that highlights the challenges on the transposition of the EU Directive to the national procurement policies and legal framework is the PPI2Innovate project. Within this project a "Trans-regional Study on Institutional Frameworks" has been realised covering the implementation of the EU Directive 2014/24 in six participating countries: Croatia, Czech Republic, Hungary, Italy, Poland and Slovenia. This Study is available at *https://www.interreg-central.eu/Content.Node/PPI2Innovate/Transregional-study-on-institutional-frameworks-EN.pdf*.

particular CPBs) from different member States.[35] The new strategies of cooperation in public procurement may allow the contracting authorities "to derive maximum benefit from the potential of the internal market in terms of economies of scale and risk-benefit sharing,"[36] while encouraging the participation of SMEs and new innovative companies in public tenders.[37]

National policies and institutional frameworks that foster innovation are different with regard to the distribution of competences at various institutional levels (i.e. national, regional, and local).[38]

The Directive[39] gives a more detailed structure for preliminary market consultation (PMC), describing it as a fundamental preparatory phase to enable procurers to cross-check their needs with actual offers on the market. Through PMC, contracting authorities will be able to identify the appropriate procurement approach, the desired minimum requirements for the innovative solutions, and the feasibility of the main assumptions derived from the business case, the subject of the PMC. A PMC has feedback mechanisms that enable contracting authorities to raise the interest of the market to respond in an upcoming call for tenders and to increase the likelihood for economic players to respond the said call for

[35] R. CAVALLO PERIN – G. M. RACCA, *European Cross-border Procurement and Innovation. Cit.* S. PONZIO, *Joint Procurement and Innovation in the new EU Directive and in some EU-funded projects, op. cit.*, 10.

[36] Directive 2014/24/EU, Wh. 73.

[37] The first results of EU-funded PCP projects demonstrate that half of the solutions developed in this context were deployed within a year, thus opening a route to the market for start-ups and innovative SMEs (71% of contracts are awarded to SMEs/start-ups); stimulating cross-border expansion (34,6% of contracts are awarded on a cross-border basis); and strengthening the European competitiveness (97,5% of contractors perform 100% of their research and development in Europe). In Italy the Legislative Decree 50/2016 on public contracts encourages networks of central purchasing bodies (CPBs) in order to promote, among others, the participation of SMEs.

[39] See art. 40 Directive 24/2014/EU.

tenders. Contracting authorities are required to ensure transparency and non-discrimination even during the conduct of a PMC.

Innovation procurement using PMC allows public procurers to engage with the market at an early stage, more particularly, in cases where they have already identified their needs and have completed the corresponding cost-benefit analysis. PMC gives them an opportunity to gather relevant information about the project and evaluate the ability of economic operators to develop innovative solutions within a given time.[40] It also allows contracting authorities to effectively communicate their needs to suppliers as they prepare the tender and inform economic operators of their procurement plans and requirements. In doing so, contracting authorities can either adopt a top-down approach by asking economic operators to present their solutions, or a bottom-up consultation with end-users through an interview on their most significant unmet needs and their suggestions on possible ways to address their needs.

The specific provision on PMC in the 2014/24/EU Directive has institutionalized the "technical dialogue" under recital 8 of Directive 2004/18/EC by enhancing the legal security in consulting the market before drafting the technical specifications. The new directive recognizes the possibility of potential tenderers having a precise and understandable description of the goods or services to be supplied, and, participating in a preliminary market consultant will give them an opportunity to decide on whether the call for tender is of interest to them.

In Italy, for example, contracting authorities use a PMC before launching a procurement procedure to inform economic operators of their relevant plans and

[40] OECD (2017), *Public Procurement for Innovation: Good Practices and Strategies*, OECD Public Governance.Reviews, *supra* n.1. Cfr. O. PANTILIMON VODA – C. JOBSE, *Rules and Boundaries Surrounding Market Consultations in Innovation Procurement: Understanding and Addressing the Legal Risks*, in *EPPPL*, 11, 2016, 179.

requirements and to define the functional specifications of the products/services to be procured.[41]

The Directive recognizes the need to support new innovative companies that have disruptive and totally new solutions to the unmet needs but are facing difficulties such as limited distribution channels for market expansions. The Directive similarly clarifies the rules for a more effective market consultations in the preparation of the tender and in the conduct of procurement procedure by allowing for the use of various forms of market consultation such as physical and online meetings or questionnaires, presentations and testing of samples allowing end-users to verify the suitability of the proposed solutions in real-life conditions, and conventional methods such as competitions, hackathons, idea markets or category innovation roadmaps.[42] In addition, the Directive promotes a greater consideration for environmental, social and innovation-related award criteria with emphasis on the total life-cycle cost of a certain solution, and strengthens the support for a larger market pull, and spreads the individual procurement risk in early innovative projects through Rdmore neatly defined rules on joint and cross-border procurement.[43]

[41] Trans-Regional Study on Institutional Frameworks, *op. cit.*, 18.

[42] European Commission (2018), *Guidance on Innovation Procurement*, *supra* n.2.

[43] In particular, Directive 2014/24/EU (art. 39) provides different means to permit contracting authorities from different Member States to act jointly in the award of public contracts through the possibility for contracting authorities of one member States to use centralised purchasing activities offered by CPBs located in another Member State (and to offer, providing this possibility in the tender documents, its activities to contracting authorities from other Member States: see below, art. 39 § 2: "*Member States shall not forbid*" this possibility); the possibility for contracting authorities from different Member States to jointly award a public contract, conclude a framework agreement or operate a dynamic purchasing system (see art. 39 § 3 Directive 24/2014/EU); the possibility to set up a joint entity, including European Groupings of Territorial Cooperation (EGTC) (see art. 39 § 5 Directive 24/2014/EU).

Furthermore, the Directive fosters innovation-friendly procurement procedures by introducing innovation partnership, which enables contracting authorities to have an innovative solution tailored to their requirements through R&D funding similar to the procurement of the innovative solution[44]. This procedure, in contrast to PCP, constitutes an actual procurement procedure leaving contracting authorities greater flexibility in the design of the process (phased or not; with multiple awards or a single award; with the subdivision of risks and benefits or not), while the obligation to respect the principle of competition remains. The combination of PCP and PPI puts together R&D activities and the purchase of innovative solutions in a unique, phased procedure. Nevertheless, such advantage is counterbalanced by the risk that the final product or service might not be in line with the qualitative standards and needs of public administration which may change over time.

The Public Procurement Directive also clarifies the rules on the conduct of competitive procedures with negotiation, which may be used to improve and adapt tenders in a way to obtain the best possible outcomes. Furthermore, it simplifies the rules on the conduct of competitive dialogue, which is useful for the procurement of technically and financially complex projects. It is worth noting that the Directive gives preference to these procurement procedures over the "standard" open and restricted procedures because they allow for greater interaction and dialogue with the market.

The other approach by which contracting authorities promote innovation in procurement is by including in the technical specifications (Art. 42, EU Directive 24/2014) of the procurement documents for works, services and supplies their requirements for buying innovation. The "technical" specifications become "functional" specifications and may include functional and performance requirements designed to achieve the objectives in

[44] See on this issue the chap. 12 in this book: C. KRÖNKE, *Innovation Partnerships: Purpose, Scope of Application and Key Elements of a New Instrument of Strategic Procurement.* See also: A. CASTELLI, *Smart Cities and InnovationPartnership A New Way of Pursuing Economic Wealth and Social Welfare*, in *EPPPL*, 13, 2018, 207.

the best possible way. Functional and performance-related requirements are appropriate means to favour innovation in public procurement.

In one experience of joint procurement funded by a EU Project of innovative solutions[45] for example, partners included in the tender documents "functional" specifications. For the procurement of a fall alert system, project partners drew up technical and functional requirements by describing the expected performances of the product, such as detecting falls by persons/residents/patients; alerting in the event of an actual fall, making it possible to ensure that the alert was noticed, and tracing alerts so that medical personnel would be able to access a history to permit optimized fall management. Partners also described the actual functionalities of the device (i.e. not changing the nature of the living space of the patient or resident; being neutral for the patient/resident, not requiring the wearing of a device; respecting the person's privacy; allowing parameterization according to different fall contexts; allowing the transmission of the alert inside and outside the institution, with information on the place of the fall and the time of the alert).

In this phase, it is important to stress the need for a preliminary market consultation (PMC). A comprehensive and reciprocally beneficial dialogue with the market can help in identifying the most innovative products and in drawing up detailed functional specifications, while ensuring the principles of transparency, equal opportunity and competitiveness, in order to encourage a wider participation of as many innovative solutions as possible.

[45] The Healthy Ageing Public Procurement of Innovations (HAPPI) project. The HAPPI project is a cross-border PPI established by central purchasing bodies from 5 different Member States of the European Union in order to procure solutions for the healthy ageing through a single framework agreement divided in 5 different product lots. See in this matter: G. M. RACCA, *Joint Cross-Border Procurement of Innovative Solutions in the Healthcare Sector. The HAPPI project experience*, Turin University Press, 2019, forthcoming. See also: European EU Commission, *Support of the internal market policy for growth: Feasibility study concerning the actual implementation of a joint cross-border procurement procedure by public buyers from different Member States*, December 2016, 62 (BBG-SKY)

Finally, innovation procurement gives paramount significance to the award criteria. The 2014 EU public procurement directives provide preference to the use of Most Economically Advantageous (MEAT)[46] in the award criteria. Accordingly, the award of the contract should not be based exclusively on the lowest price criteria but should also take into account other non-price factors such as the quality of the tender and an evolution of functional specifications. As a result, economic operators are encouraged to ensure the highest quality/price ratio. In the end, it is still the duty of the public procurer to identify an optimal combination of award criteria that assesses the costs over the entire expected life-time of the product and the convergence between proposed solutions and users' needs.

The evolution of innovation requires a hight knoledge of the market and of the needs, thus confirming that innovation requires networks of purchasers and of juries to assure optimal choices.

[46] Directive 2014/24/EU, Art. 67.