White Paper on Public Procurement of Innovation (PPI): CSIC's situation analysis and policy suggestions

Technological transfer and commercialization of public research results through PPI in the Mediterranean region – PPI4MED project

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Table of contents

Introduction

Innovation is one of the essential factors of a country's economic growth, which is why it occupies a notable place in European and national policies. In addition, it is one of the keys to job creation, medium-term growth, productivity and, ultimately, improving competitiveness.

The title of the PPI4MED project stands for "Technology transfer and commercialization of public research results through PPI in the Mediterranean region", and it aims to boost commercialisation of research results from public research institutions through public procurement of innovation programmes and projects and private-public commercialisation partnerships. To achieve this general objective there are 3 specific objectives to be fulfilled:

1) To create awareness through the creation of 5 national Living Labs, where research centres, public buyers and private sector sellers are brought together for the co-creation of new products applied to the needs of the Mediterranean society; and 1 international Living Lab to foster technological transfer in MED.
2) To build capacities and train on public procurement of innovation to the key public procurers' officials, transfer technology employees of research centres and lawyers in industry and private sector.
3) To demonstrate commercialization of research results through precompetitive analysis of promising products and services and public procurement of innovation pilot tenders in each country.

The PPI4MED project receives financial support from the European Union (EU) under the ENI-CBC MED programme, and it is being executed in five Mediterranean countries: Spain, Italy, Tunisia, Egypt, and Jordan.

The first specific objective aims to create awareness of Public Procurement of Innovation (PPI) within the country parties, and to do so it is important not to forget the policymakers. It is vital to raise the awareness of policymakers in each country to promote PPI as a strategic instrument to transfer results as part of the science-policy in each country. Public Procurement of Innovation can be a transformational instrument for scientific policy and R&D results financed by the public sector. In order to maximize the impact and sustainability of the project results, it is also essential to engage with all the important actors that take some part on the process of Public Procurement of Innovation.

One of the most important parts of the PPI process is the legal procedures that all actors must follow in the process. These legal procedures are developed by the Public Procurers at the highest level (Ministry), and carried out by the Public Procurers at national, autonomic and local level. Therefore, having on open conversation with the Ministry and as many public procurers as possible is an important matter, both to create awareness, and to suggest improvements at the highest level. Moreover, the purpose of the partners of the PPI4MED project is to present the PPI4MED model to all stakeholders, but mainly to public procurers and policy makers. To reach the objective the PPI4MED project must be in close contact with the all actors and stakeholders, mainly those at the highest level of PPI policy making and decision. This way the policymakers can understand fully the model the PPI4MED project is proposing and they could include it in the PPI national legislation.

The objective of creating awareness of the PPI instrument will be achieved through many activities, but to be in touch with the highest level of policymaking, it will be necessary that each NRC creates a Policy Makers Group (PMG) with the key actors, entities and bodies responsible for innovation policy in the respective countries. They will mainly be the Ministries and departments responsible for innovation policies at national, autonomic and local level. Moreover, the NRC can study if it is necessary that other important stakeholders are present in the Policy Makers Group. The goal of this group is to create awareness in the policymakers about the importance of PPI as an instrument to transfer results from public R&D Centers as well as to align future policies with the potential of this instrument.

The role of the Policy Makers Group is vital to maximise the impact and sustainability of the project results beyond PPI4MED, because the partner is closely working with the public procurers, who are the creators of needs, and also the ones in charge of policy and decision making. The PMG meetings will take place after the project has been implemented for some time, thus giving the National Research Center enough time to have executed many activities and obtain some preliminary conclusions about the PPI process, which will allow them to present them to the stakeholders and have a starting point. In this scenario, several objectives are pursued:

- Generate awareness in the policymakers about the importance of PPI as an instrument to transfer results from public R&D Centres.
- Align future policies with the potential of this instrument.

The White Paper on PPI developed within the PPI4MED framework has allowed CSIC to study in detail the PPI process, analyse the current situation of the instrument in Spain, how does it affect to the research community and its particularities. It also provides wome conclussions and recommendations.

Public procurement of innovation

The Spanish Ministry of Science, Innovation and Universities defines Public Procurement of Innovation (PPI) as an administrative action whose objective is promoting the development of innovative solutions from the demand side, through the instrument of public procurement. Its general objectives are:

- To improve public services by incorporating innovative goods or services.
- To promote business innovation and, therefore, economic growth.
- To promote the internationalization of innovation using the local public market as a launch or reference client.

PPI is an instrument that can be used by any entity or body of the Public Sector that has the status of contracting authority and provides a public service in whose scope it detects a need or deficiency that cannot be addressed through the acquisition of goods or services offered by the market.

PPI can be divided in two types, depending its purpose:

1. Public Procurement of Innovative Technology (CPTI): its object is a product or service that does not exist at that time, but whose development is already in a phase very close to the market.
2. Pre-commercial Public Procurement (CPP): its purpose is an R&D service that would conclude with the approach to the market of one or several innovative solutions suitable to satisfy the needs identified by the awarded power.

The Ministry has developed a powerful tool called “Mapa de la Compra Pública de Innovación en España” (Map of PPI in Spain). It shows all PPI that have been carried out by different Spanish public agents during the last six years (2017-2022), and it aims to achieve a global perspective of the actions regarding PPI carried out. This tool is very useful both for public administrations and for the rest of the participants in PPI processes. In the case of the Ministry of Science, Innovation and Universities, it constitutes as first approximation to the real state of the PPI in Spain will facilitate strategic decision-making within the framework of the policy to promote this tool at the state level. Figure 1 shows the current information shown in the Map.

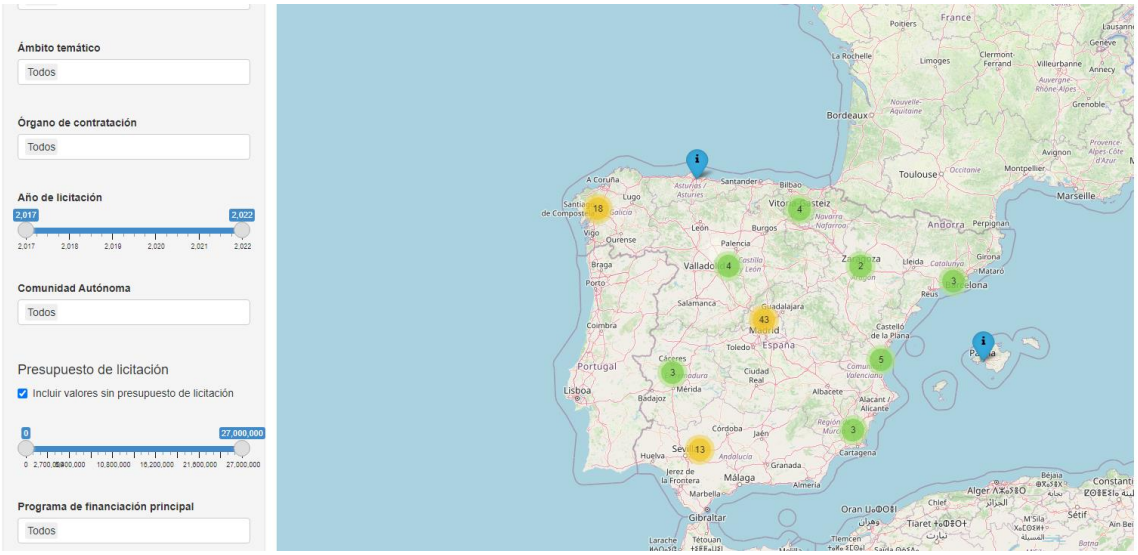

Figure 1. It shows the Mapa de la Compra Pública de Innovación en España developed by the Spanish Ministry of Science, Innovation and Universities.

The Ministry of Science, Innovation and Universities is very focused on promoting PPI as an instrument for innovation, and to do so they have created the Demand-Driven Innovation Promotion Line ("FID Line"), which is a program aimed at promoting Public Procurement of Innovation (PPI) actions among public sector organizations and entities. The FID Line offers co-financing from the European Regional Development Fund (FEDER).

Many institutions in Spain have been working on studying PPI as an innovation instrument and developing good practices and an adequate policy adapted to their idiosyncrasy, but following the national and international regulations.

According to Agencia Valenciana de Innovación (AVI) the PPI process has four phases:

- **Phase 1: analysis and detection of needs**
  This is the phase where objectives to be achieved through the public contract are defined. The public procurer has to detect objectives, needs and challenges, which identify whether the Public Procurement of Innovation is likely to be the way to achieve the solution to the need or other instrument is more suitable.
- **Phase 2: involvement of different actors**
  The most important part of this phase is the identification of the relevant actors that will be involved in the procurement (companies, universities, national research centres, technological institutes, etc.), as well as the definition of the mechanisms to establish communication with these actors.

- **Phase 3: start of the purchase process**
  Here is where the public procurer has to choose the bidding procedure and the mechanisms that must govern the procurement, including evaluation criteria, intellectual property clauses and drafting of the specifications, among others.
- **Phase 4: monitoring and evaluation**
  This is the phase of control of contract execution and subsequent evaluation to ensure compliance with objectives and reuse good practices.

Ayming España, a consultant agency specialized in Public Procurement and Public Procurement of Innovation defines these four phases a little different.

- **Phase 1: initial analysis**
  This is phase is composed of two activities: PPI impulse and vigilance of opportunities. In the first one is where the strategic visions, the value proposal of R&D projects and needs of the public procurers are identified. While the second one is more focused on proactive and reactive PPI, prior announcement and future PPI tenders, as well as financial lines and opportunities.
- **Phase 2: consultancy**
  The is the phase where the agents or actors are identified, the challenges defined and the preliminary market consultancies (PMC) are prepared and celebrated. The preliminary market consultancy (PMC) is the process by which the buyer dialogues with the market based on the identified challenge, with the intention of obtaining the necessary information to be able to propose the tender in an effective way, balancing the interests of the institution with those of potential suppliers. They are an essential part of the PPI tender process. For example, to be considered eligible for the FID Line the public procurer must have celebrated a PMC.
- **Phase 3: PPI tenders**
  Here is where the public procurer has to publish the PPI tender, choosing the evaluation criteria, preparing the offer and making as many technological studies as needed.
- **Phase 4: execution and financial reporting**
  This is phase covers two different activities: execution and financial reporting. In the execution the public procurer must confirm that the awarded actors are following and fulfilling the expected mid-term and final milestones, as well as the

accepted phases. During the financial reporting the actor must justify the financial aid they have received.

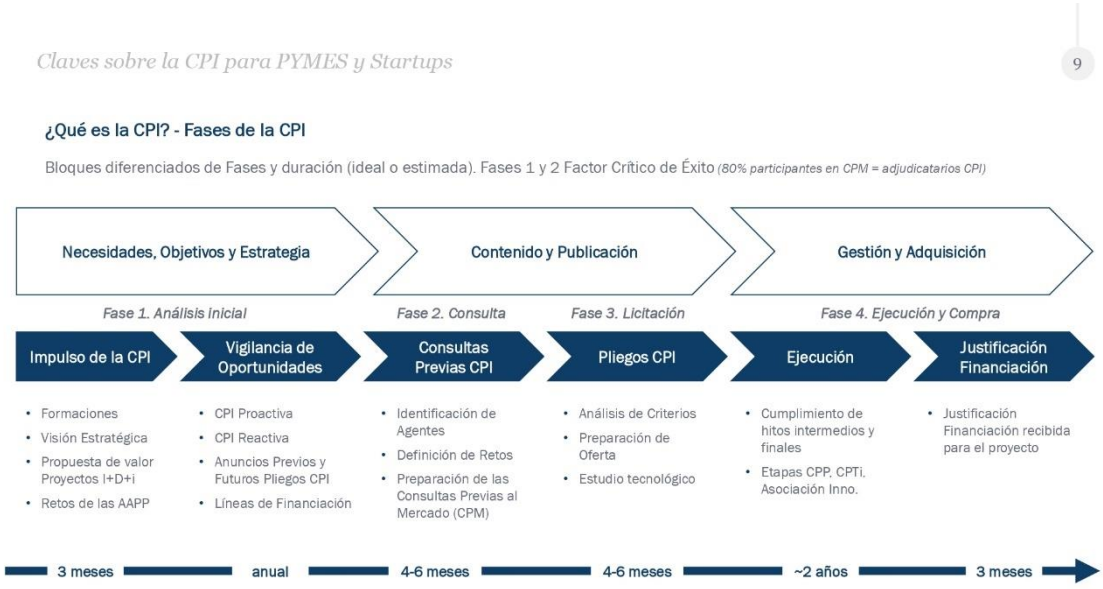

Figure 2. It shows the PPI phases Ayming has defined.

Methodology

The methodology for the creation of the PMG and the White Paper has been developed by the Lead Beneficiary and shared with all PPI4MED partners. Given the many differences between the participating countries of the PPI4MED project, the methodology is a general framework for all partners and each one will adapt it to their situation and idiosyncrasy.

After analysing the general methodology proposed and the Spanish situation, the methodology used by Spain was:

Phase 1. Preparations

This phase has two main outputs:

- Creation of an internal the PMG working group
  In Spain's case the PMG working group was created alongside the Living Lab working group, because after an internal analysis, it was deemed best for the implementation of the PPI4MED project in Spain and at CSIC's to have the same responsibles for both the PMG and the Living Lab. Therefore, the working group was made out of 5 people:
  - One legal representative, which was the head of the legal department at Deputy-Vipresidency for Knowledge Transfer.
  - One institutional responsible, which was the Deputy-Vipresident for Knowledge Transfer.
  - One technical responsible, which was the project manager of PPI4MED in Spain.
  - Two technical technicians, one more focused on the technology transfer aspect and other on the legal aspect.

  Having the same people at both the PMG and Living Lab working groups allowed CSIC to develop the Living Lab with a full vision of the future policymaking related activities.

- Stakeholder identification and PMG creation
  The working group focused a lot of their time at the beginning of the implementation of this WP in identifying and engaging key public procurers, policy makers and stakeholders at all levels: international, national, regional and local. Understanding their perspectives and needs will be the basis for both the Living Lab implementation, and the policymaking activities.

Once the key public procurers, policy makers and stakeholders were identified the working group conducted several bilateral meetings in which they explained the purpose of the PPI4MED project, its model and how it would help both the National Research Centers and Public Procurers to foment the PPI as an instrument to help their needs. The aim of these meetings was dual: to interest the public procurers on the project so they could become participants of the Living Lab; and to engage the policymakers at all levels to create a group with them and work furthermore in the future in PPI policymaking related issues. The stakeholders were invited to join the policy makers group (PMG).

In the annex the list of key public procurers, policy makers and stakeholders at all levels can be found in Table 1; and the list of the public procurers with which CSIC contacted and their interest in the project and Living Lab of PPI can be found in Table 2.

Phase 2. Analysis and desk-research

The phase of analysis and desk-research is very important to have a strong foundation for the policymaking group meetings. The working group worked alongside agencies specialized on PPI for a literature review, analysis of legal and policy framework and case studies.

It's in the phase where the meetings of the policy maker group took place. In Spain case it was impossible to organize semesterly meetings of the PMG as initially planned. This was due to:

- The large number of interested institutions
- Problems with the skateholders' agendas
- Problems with the politic year agenda. During 2021, 2022 and 2023 many autonomic electoral procedures took place, as well as the general elections in 2023. All these procedures put a halt in the engagement that the public procurers could have with the PPI4MED project, making it difficult to advance properly.

With all of this in mind the working group decided that it would be best to conduct the PMG meetings as bilateral meetings with every institution interested, instead of semesterly meetings all together. This approach would allow the working group and the stakeholders to deep-in the perspective of each institution regarding the situation of PPI

and how they are tackling it, therefore making the meetings more fruitful and obtaining the most interesting conclusions.

Phase 3. White Paper Development

With the information gathered from the research findings, the analysis, the desk-research and the meetings with the stakeholders, a White Paper on PPI as an Instrument to transfer results from the R&D Research Centers would be created by the Spanish partner. It would be presented and shared with all stakeholders.

Analysis and Desk-research

Note Report on public procurement of innovation after the amendment of the Spanish Science, Technology and Innovation Law

1. Context and objective

Public Procurement of Innovation (hereinafter, "**PPI**"), is designed as a procurement modality driven by Public Administrations, that aims to increase investment in R&D&i and to improve public services from the demand perspective, being considered a strategic commitment of the OECD and the European Union, especially promoted in recent years.

In Spain, PPI is articulated, following the reform of Law 14/2011, of June 1st, on Science, Technology and Innovation, carried out through the enactment of Law 17/2022, of 5 September (hereinafter, the "**LCTI**"), in Article 36.sixies, as a catalyst formula for innovation in the Public Administration, but some limitations to its extent can be found, as the LCTI does not define PPI.

In order to understand the concept and scope of PPI, the influence of European legislation must be considered and analyzed. In this sense, the influence of the definition on the concept of "innovation", set out, for the first time, in Article 2.2 of Directive 2014/24/EU on public procurement (hereinafter, the "**Directive**"), is undeniable, according to which, innovation consists of the "*acquisition 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 method of organizing business practices, workplace organization or external relations, among others, with the aim of helping to solve societal challenges or to support the Europe 2020 Strategy for smart, sustainable and inclusive growth*".

As "innovation" is defined, in line with European regulations, the most recent Spanish doctrine considers that PPI in Spain could be defined as an "*administrative action to promote R&D&i aimed at boosting the development of new innovative markets, from the demand perspective, through the instrument of public procurement. PPI, thus, promotes technological development as an effective mean to obtain innovative products and services, that are better adapted to the needs of the Public Administration, through*

public-private collaboration. In essence, it is nothing more than another concrete manifestation of the fact that public procurement has ceased to be an adjectival activity for the development of substantive policies (which require products, services and works) to become, itself, a public policy aimed at satisfying substantive public policy objectives" [1].

Although the LCTI does not include a specific definition of PPI, what it does establish are the objectives to be reached when promoting PPI, which are:

"*a) The improvement of public services and infrastructures, through the incorporation of innovative goods or services that satisfy duly identified and justified public needs.*

b) Economic dynamization, and the internationalization and competitiveness of innovative companies.

c) The promotion of knowledge transfer and the application of research results, and the generation of launching markets for new technology-based companies.

d) Cost savings in the short, medium, or long term.

e) Experimentation in the design of public policies."

This last objective, as stated in the manual "Experimentation in Public Policies"[2], is "*a powerful tool for the design, implementation and promotion of innovative public policies based on evidence. The use of public policy experimentation is an ideal mechanism for finding out, based on evidence, the effectiveness of public policies in isolation from other effects. In this way, it makes it possible to improve their impact and their design, to learn from public policies developed in other contexts - although, with limitations - and to provide citizens with a more effective and transparent framework for public action, that generates greater value in the medium and long term*".

The LCTI refers to the object of PPI as "*acquiring innovative goods or services that do not currently exist on the market as a final product or service, or at researching solutions to future public needs*" but in order to comply with PPI, it is compulsory that the resulting technology is included in any of the lines of the Spanish Strategy for Science, Technology and Innovation (hereinafter, the "**SSSTI**"). Actually, and completely aligned with LCTI, the SSSTI proposes the same approach, with identical aims, as by promoting the collaboration between research centers and innovative (private) companies, for the development of new technologies, in order to reach the optimization of demand for the creation of a "science industry".

Under this general mandate of public-private collaboration, the SSSTI emphasizes its role as a catalyst for innovation and business leadership, boosting the search for competitiveness through R&D&i as "*a fundamental pillar of this strategy, aimed at favoring the transfer of knowledge*." Therefore, the SSSTI states that "Spain should stimulate symbiosis between the scientific and business spheres, and foster the development of their respective capacities." [3] In this sense, systemic and systematic innovation will allow innovation to be present in all areas of society, public and private, and in all sectors in the Country's major objectives, as the SSSTI promotes it by stating that "*systemic innovation will bring the results of innovation and its processes closer to and involve society. In this regard, it should be noted that Public Procurement of Innovation will be promoted in the public sphere (State Government, Autonomous Regions, local authorities, public companies, universities, etc.), which will turn public administrations into drivers of innovative activity. To this end, specific lines of PPI will be set up in areas such as health, mobility, and the smart and sustainable agri-food chain. The main objective of this activity is to ensure that business R&D&I acts as a recurrent investment for companies, and not as a mere adaptive reflex to market situations or an activity that is abandoned at the first onslaught of an economic crisis*."[4]

This being considered, it is possible to infer that the innovation process requires ongoing support, depending on the needs and innovative status of the company (R&D&i intensive, occasional innovator, new entrant...), as well as a public policy to raise awareness of the need for, and the benefits of, innovation that will allow the perimeter of innovative companies in the Spanish science sector to be extended.

As can be observed, this promotion of PPI by Public Administrations affects all levels and public bodies. In this sense, the Council Spanish National Research Council (hereinafter, "**CSIC**"), State Agency for scientific research and technological development, forming part of the General State Administration and being affiliated to the Ministry for Science and Innovation, in accordance with its purpose, as set out in Article 4 of its Statutes, i.e. "*the promotion, coordination, development, and dissemination of multidisciplinary scientific and technological research, with the aim of contributing to the advancement of knowledge and to economic, social and cultural development, as well as to the training of personnel and the provision of advice to public and private entities in these areas*", has to comply with the mandate foreseen in the LCTI and boost PPI as part of its innovation policies, instrumentalizing the transfer of knowledge to private companies supplying the public sector.

In the above context, the CSIC required from the law firm ROUSAUD COSTAS DURAN, S.L.P.U. (hereinafter referred to as "**DWF-RCD**") to draw up a Note Report on PPI after the amendment of the LCTI (hereinafter, the "**Note**") in order to analyze useful aspects of PPI for CSIC.

1 Carrillo Donaire, J. A. (2021). Public procurement of innovation: challenges and opportunities for the development of R&D&I from public demand. IUS ET VERITAS, (62), 38-59. https://doi.org/10.18800/iusetveritas.202101.0

2 Martín Carreter, J.M. (Dir.) et al. (2022). Experimentation in Public Policies. State of the art and elements for its promotion in Spain. COTEC-RED2RED.

3 SSSTI, p. 39.

4 SSSTI, p. 40.

2. Regulatory framework

The LCTI devotes an entire title (Title III) to the promotion of scientific and technical research, innovation, transfer of knowledge, dissemination and scientific, technological and innovative culture, in order to generate a package of measures to be implemented by Public Administrations (among others, CSIC) to this end. In said title, Article 33 can be found promoting the "*active participation (…) in the development of research and the implementation of innovation in order to stimulate quality research and the generation of knowledge and its transfer, as well as to improve productivity and competitiveness, the knowledge society and social welfare through the creation of a culture of innovation, to the benefit of social welfare, health and the living conditions of people".* To this end, specifically, the following shall be carried out*: "measures that reinforce the innovative role of Public Administrations through the promotion of the application of emerging technologies, especially through instruments such as accelerators, incubators and demonstrator centers; experimentation and dissemination spaces; public procurement of innovation; and framework service agreements for the development of solutions involving the introduction of disruptive technologies in the Administration*."

This express but generalist mandate on the incorporation of PPI into the policies of the Public Administrations of the General State Administration is, as pointed out in section 1 of this Note, reflected and its scope clarified, in article 36.sixies of the LCTI, which reads as follows:

"*1. Public administrations, public sector bodies and entities shall promote the development of public procurement of innovation, with the aim of fulfilling the following objectives:*

a) The improvement of public services and infrastructures, through the incorporation of innovative goods or services that satisfy duly identified and justified public needs.

b) Economic dynamization, and the internationalization and competitiveness of innovative companies.

c) The promotion of knowledge transfer and the application of research results, and the generation of launching markets for new technology-based companies.

d) Cost savings in the short, medium, or long term.

e) Experimentation in the design of public policies.

2. The purpose of public procurement of innovation may be the acquisition of innovative goods or services that do not currently exist on the market as a final product or service,

or research into solutions to future public needs, and the resulting technologies must be included in any of the lines of the Spanish Strategy for Science, Technology and Innovation or in the plans and instruments of the corresponding Autonomous Administration.

3. Public procurement of innovation may adopt any of the following modalities:

a) Public procurement of innovative technology.

b) Pre-commercial public procurement.

4. Prior to the commencement of public procurement of innovation processes within the scope of their respective competences, Public Administrations, public sector bodies and entities shall determine the specific public service needs not satisfied by the market, detail the corresponding functional specifications of the solution to be achieved, and carry out the necessary studies and consultations in order to verify the innovative content of the aforementioned solution.

5. The tenders to which the procedures for the public purchase of innovative technology give rise shall be governed by the provisions of Law 9/2017, of 8 November, with the exclusions in the field of R&D&I contemplated in article 8 of the aforementioned law being applicable where applicable. On the other hand, the use of the innovation partnership procedure will be encouraged."

To fully understand the scope of the regulatory framework introduced in the LCTI, it becomes necessary to analyze the Directive from which it derives and which, to a certain extent, harmonizes PPI legislation at the European level. In this sense, the explanatory memorandum 47 of the Directive specifies as follows:

"Public authorities should make the best possible strategic use of public procurement to promote innovation. The procurement of innovative goods, works and services plays a key role in improving the efficiency and quality of public services, while responding to key societal challenges. It contributes to obtaining the best value for money in public investments, as well as broad economic, environmental, and social benefits, by generating new ideas, translating them into innovative products and services and thereby fostering sustainable economic growth.

Where solutions already available on the market cannot meet a need in relation to the development of innovative products, services or works and the subsequent purchase of the resulting supplies and services or works, Public Administrations should have access to a specific procurement procedure for contracts falling within the scope of this

Directive. This specific procedure should allow contracting authorities to establish a long-term innovation partnership for the development and subsequent purchase of new innovative products, services or works, provided that they comply with an agreed level of performance and costs, without the need to use a separate procurement procedure for the purchase. The innovation partnership should be based on the rules applicable to the tendering procedure with negotiation and contracts should be awarded solely on the basis of the best value for money, which is the best way to compare offers of innovative solutions. For both large-scale projects and smaller innovative projects, the innovation partnership should be structured in such a way as to generate the necessary "market pull", providing incentives for the development of innovative solutions without foreclosing the market."

Nevertheless, the Directive also contributes to the PPI regulation in each country, promulgating an express provision of the procedure applicable thereof. In this sense, Article 26 of the Directive states: "*member States shall also provide that contracting authorities may apply a competitive procedure with negotiation or a competitive dialogue in the following situations: a) for works, supplies or services which meet one or more of the following criteria: (i) the requirements of the contracting authority cannot be met without the adaptation of readily available solutions, (ii) they involve a project or innovative solutions, (iii) the contract cannot be awarded without prior negotiations because of specific circumstances linked to the nature, complexity or legal or financial set-up, or because of the risks attaching thereto, (iv) the contracting authority cannot establish with sufficient precision the technical specifications by reference to a standard, (…); (b) in respect of works, supplies or services where, in response to an open or restricted procedure, only irregular or unacceptable tenders are submitted. In such situations, contracting authorities shall not be obliged to publish a contract notice if they include in the procedure all tenderers, and only those tenderers, who satisfy the criteria (…) and who, on the occasion of the previous open or restricted procedure, have submitted tenders in accordance with the formal requirements of the procurement procedure. In particular, tenders which do not comply with the procurement documents, which were received late, which show signs of collusion or corruption or which have been considered abnormally low by the contracting authority shall be considered irregular.*

Moreover, the European Commission´s consultation[5] states that, "*through PPI, Europe aims to considerably reduce the gap and disconnection, which always exists, between research and innovation processes and technology and public purchasers. This requires the development of the coordination mechanisms of the public bodies responsible for*

public procurement and the formulas for collaboration with private agents, as well as the regime to be assumed by public administration and companies to jointly bear and share the risks and benefits derived from R&D and innovation. The most recent analyses assessing the implementation of these objectives undertaken by the European Commission show that PPI is still a challenge that has been poorly met in the European procurement market, despite the EU's investment efforts in this field."

In order to improve the challenge of implementing PPI in Spain, not only has the LCTI strengthened the position of this procedure in Spain, but recently it has been published the Law 28/2022, for the Promotion of Emerging Companies (hereinafter, the "**Startups Act**"), which boosts the innovation and entrepreneurship ecosystem. In short, the Startups Act defines what is meant by an emerging company, including in its definition knowledge-based companies (known as technology-based companies or spin-offs prior to the LCTI amendment). The Startups Act reinforces the role of Public Administrations in PPI and its impact and importance for start-ups, as it states:

"1. The Government shall include in the State Plan for Scientific and Technical Research and Innovation provided for in Law 14/2011, of 1 June, on Science, Technology and Innovation, the plans of each ministry and public body linked to or dependent on the General State Administration, for the public purchase of innovation, both for public procurement of technology or innovative processes and for pre-commercial public procurement, referred to in article 8 of Law 9/2017, of 8 November, on Public Sector Contracts, transposing into Spanish law the Directives of the European Parliament and of the Council 2014/23/EU and 2014/24/EU, of 26 February 2014, and the appropriations earmarked for their financing.

Annually, the Council of Ministers shall be informed of the implementation of the innovative public procurement plans and the evaluation of their results.

2. Public administrations shall take into account the characteristics of emerging companies when specifying the economic and technical solvency requirements for companies participating in innovative public procurement and pre-commercial public procurement procedures, whether or not they are governed by Law 9/2017, of 8 November, so as not to create obstacles to their participation in the tender.

They shall also make partial payments whenever the performance of the contract can be divided into several performance phases.

3. The administrative specifications shall assess the inclusion of capacity and solvency requirements and award criteria that facilitate equal access to emerging companies

located in sparsely populated areas. Through the incorporation of specific social and environmental requirements and characteristics that result in the improvement of the rural environment, the use of local and ecological products, as well as sustainable forestry management, renewable energies and energy saving will be promoted, provided that the principles of competition, equality and non-discrimination in public procurement are respected.

4. The administrative specifications may establish that the ownership of the intellectual property rights deriving from the development of the object of the contract shall be shared equally by the contracting administration and the emerging company awarded the contract."

Therefore, public administrations will have to take into account the specific conditions of start-ups in PPI, facilitating their participation as tenderers.

In addition to the above, it should be borne in mind that PPI is, essentially, a public tendering procedure and will, therefore, be subject to the provisions of the Law 9/2017 of 8 November on Public Sector Contracts, transposing into Spanish law the Directives of the European Parliament and of the Council 2014/23/EU and 2014/24/EU of 26 February 2014 (hereinafter the "**LCSP**"). From its scope of action, the LCSP also mentions PPI. In fact, in its preamble it already refers to the importance of PPI, stating: "*in the field of innovation and development, with the idea of favoring the most innovative companies, the introduction of the new innovation partnership procedure is particularly noteworthy, which has been expressly envisaged for those cases in which it is necessary to carry out research and development activities for innovative works, services and products, for their subsequent acquisition by the Administration. These are therefore cases in which the solutions available on the market do not meet the needs of the contracting authority*." More specifically, the preamble already provides guidance for the introduction of PPI as a subject of public tendering by pointing out that: *"regarding this new procedure, the new Directive outlines a process in which, following a call for tenders, any entrepreneur may submit a request to participate, after which successful candidates may submit bids, thus becoming tenderers, as part of a negotiation process. This may take place in successive stages, culminating in the creation of the innovation partnership. This innovation partnership will itself be structured in successive stages, but will no longer take place between the contracting authority and the tenderers, but between the contracting authority and one or more partners, and will generally culminate in the purchase of the resulting supplies, services or works.*"

Nevertheless, the normative body of the LCSP makes an exception to its scope of application through Article 8, excluding from the LCSP those contracts that are not related to "*research and development contracts, except those which, in addition to being included in the CPV codes 73000000-2 (research and development services and related consultancy services); 73100000-3 (experimental research and development services); 73110000-6 (research services); 73111000-3 (research laboratory services); 73112000-0 (marine research services); 73120000-9 (experimental development services); 73300000-5 (research and development design and execution); 73420000-2 (pre-feasibility study and technological demonstration) and 73430000-5 (testing and evaluation), satisfy both of the following conditions:*

(a) The benefits accrue exclusively to the contracting authority for its use in the conduct of its own affairs.

(b) the service provided must be wholly remunerated by the contracting authority."

The LCSP establishes the public procedures by means of which the contracting of services or products is carried out by the Public Administrations. The PPI, although sui generis in some aspects, is still a contract entered into between a Public Administration and a private service provider and, therefore, will be subject to the public procedures that are adapted to the PPI to be carried out which are differentiated in section 3 of this Note.

This amalgam of Laws constitutes the regulatory framework within which the PPI will be carried out and, therefore, all aspects that could affect its correct execution, both from a strategic and tactical point of view, must be analyzed.

5 Online consultation on benchmarking of national innovation procurement policy frameworks. Vid: https://ec.europa.eu/digital-single-market/en/news/online-consultation-benchmarking-national-innovation-procurement-policy-frameworks

3. Application of the legal framework of PPI in the LCTI

The regulatory framework within which PPI can take place, as stated in the previous section of this Note, necessarily entails observance of the strategic and tactical aspects to complete the PPI purchase and to be able, from the CSIC's standpoint, to carry out the transfer of technology and all other functions established in its Statutes, with guarantees of success from the administrative point of view.

3.1. Strategic aspects.

As the LCTI requires the resulting technologies arising from PPI to be integrated in one of the strategic lines of SSSTI, it is necessary to analyze which goods or services shall be considered as included therein. The strategic lines set out by SSSTI are embedded in broad but technologically leading-edge concepts6, in the light of recent events, i.e. COVID-19, such as:

• Health - Precision medicine - Infectious diseases - New diagnostic and therapeutic techniques - Cancer and Geroscience: Ageing, degenerative diseases.

• Culture, Creativity and Inclusive Society - Human evolution, anthropology and archaeology - Cognition, linguistics and psychology - Hispanic philology and literatures

• Civil Security for Society - Spatial dimension of inequalities, migrations and multiculturalism - Monopolies and market power: measurement, causes and consequences Cybersecurity - Protection against new security threats.

• Digital World, Industry, Space and Defense - Artificial Intelligence and Robotics - Photonics and Electronics - Mathematical modelling and analysis and new mathematical solutions for science and technology - Astronomy, Astrophysics and Space Sciences - Next Generation Internet - New materials and manufacturing techniques.

• Climate, Energy and Mobility - Climate Change and Decarbonization - Sustainable mobility - Sustainable cities and ecosystems.

• Food, Bioeconomy, Natural Resources and Environment - Biodiversity exploration, analysis and foresight - Smart and sustainable agri-food chain.

This list of disciplines, as observed, addresses the full spectrum of R&D&i interests and, as such, necessarily needs to be reinforced through collaborative activities carried out between Public Administrations and private entities that break down the traditional boundaries between disciplines.

Taking this into consideration, the functions of CSIC need to be examined inasmuch although SSSTI allows research activities to be carried out in the whole field of R&D&i, CSIC must limit its activities to those that fall within its competences. As previously stated, CSIC is governed by its Statutes, article 5 of which establishes its own functions, outlined below:

"In order to comply with its mission, the CSIC is responsible for:

a) To promote and carry out scientific and technological research and the monitoring, evaluation and dissemination of the results thereof.

b) To transfer the results of scientific and technological research to society, guaranteeing their adequate protection; and to contribute to the creation of technology-based companies.

f) Contribute to the territorial and functional structuring of the Spanish System of Science, Technology and Innovation through its own Institutes, National Centres and other research units or in collaboration with other agents.

h) To foster a culture of science, technology and innovation in society, encouraging a vocation for research, with special attention to equality between women and men, as well as to collaborate in the updating of knowledge and training in science and technology for non-university teaching staff.

k) Any others aimed at developing or promoting scientific and technological research or scientific-technical advice attributed to it by the regulations or entrusted to it by the Government, especially to contribute to the achievement of the Sustainable Development Goals.

It thus can be deduced that any R&D&i activity that CSIC may carry out, both from the point of view of social sciences and humanities and scientific-technical activity, will have a place in the strategic lines of SSSTI.

Once the strategic line of SSSTI to be followed by PPI has been displayed, CSIC must analyze where the need comes from. Being the purpose of PPI, as established in Article 36.sixies LCTI, the "*acquisition of innovative goods or services that do not currently exist on the market as a final product or service, or research into solutions to future public needs*", and the functions of CSIC, as settled in Article 5 of its Statutes, the promotion of scientific and technological research and the transfer of knowledge, it can be inferred that CSIC can act, in PPI, both as a generator of demand and of supplier, depending on

whether an innovation need within CSIC could be met through PPI or, on the contrary, it is CSIC that can participate in the PPI of other Public Administrations.

Such distinction is also pointed out by the Center for Development and Technology Innovation (hereinafter "**CDTI**"), who has developed two tools, one for supply and the other for demand, which make it possible to cover both sides and to find new synergies, both with other Public Administrations demanding innovation and, with innovative companies capable of meeting public needs, developing a constant foresight of the technological needs.

As a way of example, through the supply side, CDTI created the "CALL FOR EXPRESSIONS OF INTEREST." During this call, a mailbox was set up in which companies could submit their projects and CDTI would finance those that were finally selected. To this purpose, CDTI stated that priority would be given to those ideas that came from the private companies, and based on a detailed analysis of all the expressions of interest received, CDTI would evaluate and classify all those that were eligible depending on the funds available according to the region, the degree of innovation of the proposed technology, the degree of interest of the user Public Administration and the socio-economic impact that the reception of the prototype in one of the eligible Autonomous Communities could have.

On the demand side, CDTI has developed "IDEAS BOX REPOSITORY", a mailbox aimed at Public Administrations that could demand innovative technological solutions in order to constitute a repository of proposals that could be published by CDTI. Through these, CDTI would acquire R&D services that may result in prototypes of first products or services, in the form of test series. The prototype that may be developed will be transferred to the Public Administration that, having previously expressed its needs, and after validating the fit of its proposal with CDTI, is interested in it and can provide the real environment necessary to validate the proposed technology.

By knowing where the needs come from, CSIC will be able to know whether it is a demand or supply driven and, consequently, the specific SSSTI need they are facing.

3.2. Tactical aspects

At this point, it is important to differentiate between the two types of PPI, this is, public procurement of innovative technology (hereinafter, "**PPIT**") and pre-commercial public procurement (hereinafter, "**PPP**"), both of which are permitted and promoted under the

LCTI and other applicable legislation. In this regard, the doctrine maintains a unanimous criterion regarding the differentiation between the two, and its legal effects.

According to European Commission[7], PPP "*is a contract for R&D services in which the public purchaser does not reserve the innovative results for its own exclusive use, but shares the risks and benefits arising from the process of creating, developing and implementing solutions that have not yet been available on the market with the company awarded the contract*." Its purpose is, as a general rule, to bring an idea to development, on the basis of tests and trials, and the design of prototypes.

For López, A.M.[8], on the other side, PPIT consists of *"the procurement of an innovative and hitherto non-existent good or service, but whose development and implementation can be carried out within a reasonable period of time on the basis of pre-existing prototypes. With this acquisition, the public administration positions itself as a launch customer for those goods and services that, although they have a prototype or model, have not yet reached the commercial phase."*

Thus, the purpose of this particular purchase of good and services is the acquisition of new or improved technology, that has already undergone some prior R&D process.

This distinction in its object and scope implies a different treatment from the perspective of the application of the LCSP, since PPP is, in essence, a contract excluded from the LCSP, unless the benefits belong exclusively to the contracting authority for use in the exercise of its own activity and, furthermore, the service provided is fully remunerated by the contracting authority, as previously pointed in Article 8 LCSP. Thus, the establishment of a system of risk and profit sharing between the contracting parties constitutes one of the essential conditions for the conclusion of this innovation services contract as PPP, which is expressly excluded from the Directive and the LCSP.

3.2.1. Preparation procedure

Independently of the PPI type to be executed, PPI requires of a preparation procedure in which the Public Administration can establish its needs, as it will act as a public purchaser.

In this first phase, the Public Administration, as purchaser, organizes a meeting with the market, so called "meet the market event" by launching preliminary market consultations and prior information announcements, as provided for in articles 115 and 134 of the LCSP, in order to draw up an early demand map that offers the definition of the good or service that constitutes the object of the contract as well as the intended

R&D&I process. On occasions, the objective of this preliminary phase may be twofold, since both the Public Administration may consult the market and receive unsolicited bids, i.e., the company may propose a solution to a future need on its own.

This preliminary phase will permit the Public Administration to get enough information from the market to know whether it is a PPIT or a PPP it is looking for, in accordance with its the definitions set out earlier in this Note.

3.2.2. PPIT Contracting

Depending on the specific requirements of each product or service, the PPIT may be articulated by the ordinary (open or restricted) and special procurement procedures (tender with negotiation, competitive dialogue, and innovation partnership). However, the guides and guidelines drawn up by the EU and Spanish administrations[9] strongly recommend in these cases the choice of a procedure in which the contracting parties are in permanent contact and negotiation is possible, as procedures open to negotiation allow for greater flexibility when dealing with the four basic premises of the PPI: a) The non-existence of specific goods or services that satisfy the Administration's purchasing requirements. b) The necessary technological development of the prototype from which the desired good or service will be obtained in a reasonable time. c) The inevitable wait of the Public Administration due to the technological process. d) The initial indeterminacy of the price and the timeframe in which the final result will be achieved.

In this context, LCSP offers several alternatives, namely: tender with negotiation, open dialogue and the possibility of partnership for innovation is introduced.

3.2.2.a) Tender with negotiation

As described in Article 167 LCSP, tenders with negotiation shall be used for "*works, supply, service, works concession and service concession contracts in one of the following situations:*

a) When, in order to meet the needs of the contracting authority, it is essential that the service, as it is available on the market, is subject to prior design or adaptation work by the tenderers.

b) When the service which is the object of the contract includes a project or innovative solutions.

(c) Where the contract cannot be awarded without prior negotiation because of specific circumstances relating to the nature, complexity or legal or financial form of the subject-matter of the contract or the risks attaching thereto".

This procedure, according to Article 135 LCSP, must be published in the social media profile of the Public Administration and, as CSIC is part of the General State Administration, in the Official State Gazette. The information provided shall be sufficiently precise to enable economic operators to identify the nature and scope of the procurement and to decide whether to apply to participate in the procedure.

The rules described in LCSP for the restricted procedure shall be applicable to tender with negotiation. However, where it is decided to limit the number of participants to be invited to negotiate, the Public Administration and its departments shall in any event ensure that the minimum number of candidates invited is three. After the publication of the procedure, the Public Administration and the contracting boards shall ensure that all tenderers are treated equally. In particular, they shall not provide, in a discriminatory manner, information which may give certain tenderers an advantage over others.

The Public Administration shall negotiate with tenderers the initial tenders and all subsequent tenders submitted by them, except the final, which they have submitted in order to improve their content and to adapt them to the requirements set out in the particular administrative clauses and in the contract notice, where applicable, and in any additional documents, in order to identify the best tender.

It is important to keep in mind that "*the minimum requirements for the services covered by the contract and the award criteria shall not be negotiated*", as described in Article 169 LCSP.

During the procedure, the contracting boards shall comply with their obligation of confidentiality under the terms established in LCSP, and therefore shall not reveal to the other participants the data designated as confidential which has been communicated to them by a candidate or tenderer without the prior consent of the latter. This consent may not be of a general nature, but must specify the information to which it refers.

Once this period has finalized, the award shall be made to the tenderer justifiably chosen by the Public Administration after negotiation of the terms of the contract with one or more candidates. This being settled, LCSP states that "*the particular administrative clauses shall specify the economic and technical aspects which, where appropriate, are to be the subject of negotiation with the firms; a description of the needs of the contracting authority and the characteristics required for the supplies, works or services*

to be procured; the procedure to be followed for negotiation, whichshall at all times ensure maximum transparency of the negotiation, publicity and non-discrimination between the tenderers taking part; the elements of the service which are the subject of the contract and which constitute the minimum requirements to be met by all tenders; the award criteria".

3.2.2.b) Competitive Dialogue

Another procedure applicable to PPIT, is the competitive dialogue described in articles 172 to 176 LCSP. In this type of procedures, a special competitive dialogue panel is formed and it conducts a dialogue with the selected candidates, at their request, in order to develop one or more solutions likely to meet their needs and which will serve as a basis for the selected candidates to submit a bid.

This procedure also needs to be preceded by the publication of a contract notice in which the Public Administration shall make their needs and requirements known and defined, which may not subsequently be amended. The contract notice shall also establish the award criteria chosen and give an approximate time limit for completion.

In order to encourage the participation of companies that can offer the most appropriate and innovative solutions, Public Administration may provide in the contract notice for bonuses or compensation for all or some of the participants in the dialogue.

Once the candidates are invited to participate, the special competitive dialogue panel shall conduct a dialogue with the selected candidates in order to identify and define the appropriate means to meet their needs. In the course of this dialogue, all aspects of the contract may be discussed with the selected candidates.

The procedure may be organized in successive stages in order progressively to reduce the number of solutions to be examined during the dialogue phase by applying the award criteria set out in the contract notice, indicating whether this possibility is to be used. Once the solution or solutions to be adopted for the final phase of the tendering process have been determined by the Public Administration, the panel shall propose that the dialogue be declared closed and the solutions to be adopted, and the candidates who have submitted the best solutions shall be invited to the final phase.

Negotiations may be conducted by the panel with the tenderer whose tender is considered to offer the best value for money in order to confirm financial commitments or other conditions contained in the tender, for which purpose the terms of the contract shall be finalized, provided that this does not substantially change the elements of the tender or of the invitation to tender, in particular the needs and requirements set out

in the contract notice, and does not entail a risk of distortion of competition or have a discriminatory effect. Once the proposal has been submitted, the Public Administration shall award the contract.

3.2.2.c) Innovation Partnership

In addition to the above, Public Administrations have a procedure called innovation partnership, in Articles 177 to 182 LCSP, established as procedure aimed at the development of innovative products, services or works and the subsequent purchase of the resulting supplies, services or works, provided that they correspond to the performance levels and maximum costs agreed between the contracting authorities and the participants.

To that extent, in the particular administrative clauses, the contracting authority shall identify the need for an innovative product, service or works which cannot be satisfied by the purchase of products, services or works already available on the market. It shall also indicate which elements of the description constitute the minimum requirements to be met by all tenderers, and shall define the provisions applicable to intellectual and industrial property rights. The information provided shall be sufficiently precise to enable entrepreneurs to identify the nature and scope of the solution required and to decide whether to apply to participate in the procedure.

In this procedure, the Public Administration may decide to set up the innovation partnership with one or more partners who separately carry out research and development activities.

For the purposes of selecting candidates, Public Administration shall apply, in particular, objective criteria of solvency relating to the candidates' ability in the fields of research and development and the development and implementation of innovative solutions. As in the other procedures, Public Administrations may limit the number of suitable candidates to be invited to participate in the procedure, the minimum number of entrepreneurs to be invited to negotiate being three.

Candidates must submit a request to participate, in response to a call for competition, providing information on the objective criteria of solvency requested by the Public Administration. Only those entrepreneurs invited by the Public Administration after evaluation of the information requested may submit research and innovation projects designed to meet the needs identified by Public Administration which cannot be met by existing solutions. Once the selection of candidates has been completed, the Public Administration shall invite them to submit their research and innovation projects to

meet the needs to be covered. Contracts shall be awarded solely on the basis of the best value for money.

The innovation partnership shall be structured in successive phases following the sequence of stages in the research and innovation process, which may include the manufacture of products, the provision of services or the execution of works. The innovation partnership shall set intermediate targets to be achieved by the partners and shall provide for the payment of remuneration within appropriate time limits.

On the basis of those targets, the Public Administration may decide, at the end of each phase, to terminate the innovation partnership or, in the case of an innovation partnership with several partners, to reduce the number of partners by terminating the individual contracts, provided that the contracting authority has indicated in the specific administrative specifications that it may make use of these possibilities and the conditions under which it may do so.

In no case shall the termination of the innovation partnership or the reduction in the number of participating candidates give rise to compensation, without prejudice to the consideration which, under the conditions laid down in the specifications, is due for the work carried out.

In the case of innovation partnerships with several partners, the Public Administration shall not disclose to the other partners the proposed solutions or other confidential information communicated by a partner in the framework of the partnership without the latter's agreement. This agreement may not take the form of a general waiver, but must relate to the intentional communication of specific information.

At the end of the research and development phases, the contracting authority shall analyze whether the results achieve the agreed performance and cost levels and shall decide on the procurement of the resulting works, services or supplies.

Procurement resulting from innovation partnerships shall be carried out in accordance with the terms set out in the specific administrative clauses. When the partnership is carried out with several entrepreneurs, the selection of the entrepreneur to whom such purchases are to be made shall be made based on the objective criteria established in the specifications.

Where the purchase of the works, services or supplies involves the provision of successive services, this may only be carried out for a maximum period of four years from receipt of the decision on the purchase of the works, services, or supplies.

3.2.3. PPP procedures

As previously stated, PPP are intended for the procurement of R&D&i services for the achievement of innovative solutions that do not exist on the market, being excluded from the scope of application of LCSP in its article 8, if these three requirements are met:

1. The purpose of the contract is related to: research and development services and related consultancy services, research and experimental development services, research services, research laboratory services, marine research services, experimental development services, research and development design and execution, pre-feasibility study and technological demonstration, and testing and evaluation services.

2. The benefits derived from the innovation must accrue exclusively to the Public Administration, and the use of the good or service resulting from the R&D&i process must be reserved for it.

3. The remuneration corresponds to the Public Administration in its entirety.

Nonetheless, according to Spanish doctrine: "*Although they may fall outside the regulations on public procurement if the aforementioned conditions are not met, PPP contracts are obliged to comply with the general principles of administrative procurement, for the reasons given by the Court of Justice of the European Union in its Judgment of 13 October 2005 (Case C-458/03), Parking Brixen GmbH v. Gemeinde Brixen and Stadtwerke Brixen AG.*"[10] Article 1.1. LCSP establishes the general principles of administrative procurement under Spanish Law, which are: free access to tenders, open and transparent procedures, non-discrimination, and equal treatment of tenderers.

Therefore, as PPPs are excluded from LCSP, it becomes necessary to review the application of LCTI to PPP processes. According to Article 36 LCTI, that ensures the application of private law (thus, not public procurement), to contracts relating to the promotion and management of the results of research, development, and innovation activity. It establishes:

"The following contracts relating to the promotion, management, and transfer of the results of research, development and innovation activity, entered into by the Public Research Bodies of the General State Administration (as of CSIC) shall be governed by generally applicable private law, subject to the principle of freedom of agreement, and may be awarded directly:

b) Financing and collaboration contracts for the valorization and transfer of the results of research, development and innovation activity.

c) Contracts for the provision of research, development, and technical assistance services with public and private entities, for the performance of scientific and technical work or for the development of specialization courses or specific training activities."

Therefore, when a Public Administration wishes to carry out a PPP, it may contract directly with other entities (public or private), and regulate the agreement under private law, where the will of the parties prevails, as long as the PPP is related to the promotion, management and transfer of results of research, development and innovation activity.

Under this premise, CSIC may agree to undertake PPP with other private or public entities. However, it should be borne in mind that, by virtue of LCTI and in consideration of the provisions of the CSIC Statutes, the development of PPP must be aimed at transferring the results of research, development, or innovative activity. This opens the possibility for the CSIC to reach agreements, both as a generator of demand, negotiating with third parties, which will generally be private entities, but also as a bidder, as it may turn to other public administrations to meet its PPP needs. In any case, these procedures must be transparent and comply with the rest of the principles set out in article 1 of LCSP and outlined in this Note.

6 SSSTI, p. 9.

7 Communication of the European Commission to the Parliament, the Council, the Economic and Social Committee and Regions Committee (2007, Eur-lex).

8 López, A.M. Public Procurement in European and Spanish legal frameworkdk (p. 213-248). (2014 Aranzadi Thomson Reuters).

9 As stated in OECD (2022), Improving knowledge transfer and science-business collaboration in Spain, OECD, No. 122 (p.226), OECD Publishing, Paris, https://doi.org/10.1787/106beefc-es.

4. Conclusions and Recommendations

4.1. Conclusions

A. The promotion of PPI, according to the text arising from the reform of LCTI, is a binding mandate for Public Administrations, which will be obliged to boost this type of procedure and be made accountable to higher levels of public administration.

B. As settled in Article 36.sixies LCTI, PPI must pursue the following purposes: a) the improvement of public services and infrastructures, through the incorporation of innovative goods or services that satisfy duly identified and justified public needs; b) economic dynamization, and the internationalization and competitiveness of innovative companies; c) the promotion of knowledge transfer and the application of research results, and the generation of launching markets for new technology-based companies; d) cost savings in the short, medium, or long term; e) experimentation in the design of public policies, and the PPI must result in a technology that is aligned with the strategic lines envisaged in SSSTI.

C. The PPI reinforces its usefulness by providing for two different modalities, PPIT and PPP, depending on the intensity of the innovation required, the former for existing products and the latter for products or services to be developed.

D. PPIT must be carried out through one of the public procurement modalities applicable to innovation, in accordance with LCSP and following the requirements settled in said Law, namely: tender with negotiation, competitive dialogue or innovation partnership.

E. PPP falls outside the scope of action of the LCSP as long as the requirements established in Article 8 LCSP are met, so PPP may be agreed under the terms and conditions foreseen under Article 36 LCTI, by means of private contracts and direct awarding as long as the principles of transparency and others outlined in Article 1 LCSP are met.

F. In view of the alternatives provided, as long as CSIC is a Public Administration itself and can also provide research and innovation products and services, CSIC can act both as a generator of demand of PPI or as a supplier or tenderer in order to provide PPP services to other Public Administrations.

4.2. Recommendations

A. CSIC should review its capacities to generate new products or improve existing ones, taking into account the strategic lines defined in SSSTI.

B. In PPI procedures in which CSIC acts as a supplier, clarify with the purchasing Public Administration confidentiality and secrecy clauses, protection of research results, differentiation of pre-existing and generated intellectual property (hereinafter "IP").

C. If CSIC on its own cannot meet the needs of the Public Administration acting as a purchaser, analyze the possibility of entering into alliances with other entities to act as tenderers in public tenders from other Public Administrations. In these cases, specify the contributions of the parties, mechanisms for assigning ownership, protection and methods of exploitation of the results, with special reference to transfer of knowledge, specific distinction of ownership of the pre-existing IP, of the IP generated.

D. Regarding the transfer of knowledge in any case, CSIC shall take into account any and all alternatives established in LCTI, enabling the PPI to act as a catalyst for the transfer of knowledge.

E. In PPI procedures in which CSIC is the purchasing Public Administration, consider the provisions of LCSP in this regard and establish ab initio the minimum requirements regarding strategic issues for CSIC, such as intangibles, asset protection, confidentiality, and reputational interest safeguards

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Annex

Table 1 shows the list of identified key stakeholders regarding policymaking PPI at international, national, regional and local level.

Place	Organisation	Charge	Contact Person
European Commision	Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG-Grow)		Joanna Magdalena Grzanka
			Adina Onofrei
		Team leader Strategic Procurement	Ivo Locatelli
			Marie De Wasseige
			Katharina Knapton-Vierlich
Gobierno de España	Ministerio de Ciencia, Innovación y Universidades	Ministra	Diana Morant
		Secretaria General de Innovación	Teresa Riesgo

		Subdirectora General SGFI	Amanda Gil Sánchez
Comunidad de Madrid	Consejería de Educación, Universidades, Ciencia y Portavocía	D. G. Investigación e Innovación Tecnológica	Ana Isabel Cremades Rodríguez
		Subdirección General de Innovación Tecnológica	Vicente Parras Criado
		Área Compra Pública Innovadora	Ana María Batalla Hernández
Ayuntamiento de Madrid	Area de Gobierno de Economía, Innovación y Empleo	Concejal Titular del Área de Gobierno	Miguel Angel Redondo Rodríguez
Cataluña	ACCIÓ - Agència per la Competitivitat de l'Empresa	Consellera delegada de l'Agència per a la Competitivitat de l'Empresa, ACCIÓ	Natàlia Mas Guix
Ayuntamiento de Barcelona	Economía, Trabajo, Competitividad y Hacienda	Concejalía de Economía y Prespupuestos	Jordi Martí Grau
Comunitat Valenciana	AVI- Agència Valenciana de la innovació	Vicepresidenta y Consellera de Innovación, Universidades, Ciencia y Sociedad Digital	Carolina Pascual Villalobos
		Vicepresidente Ejecutivo AVI	Andrés García Reche

		Secretaria General AVI	Olivia Estrella López
		Jefa del Servicio de Innovación en el Sector Público y Compra Pública de Innovación	Yolanda Cárcel Fons
Ayuntamiento de Valencia	Empleo, Innovación y Promoción		
Andalucía	AAC- Agencia Andaluza del Conocimiento	Presidencia	Rosa María Ríos Sánchez
		Dirección Gerencia	María Teresa Serrano Gotarredonda
Ayuntamiento de Sevilla	Economía y ComercioTeniente de Alcalde	Delegado del Área Economía, Comercio y Turismo	Francisco Javier Páez Vélez Brancho
Navarra	Dirección General de Innovación	Dirección Gerencia	Rosario Martínez Ortigosa
		Jefatura sección de Compra Pública Innovadora	María Ángeles Montes Ros
Castilla y León	ICE- Instituto para la Competitividad Empresarial	Directora General ICE	Susana García Dacal

La Rioja	Consejería de Desarrollo Autonómico	Consejero	José Angel Lacalzada Esquivel
		D.G. Reindustrialización, Innovación e Internacionalización	Nathalie Andree Beaucourt Le Barzic
País Vasco	Agencia Vasca de la Innovación	Directora General	Leire Bilbao
	Agencia Vasca de Desarrollo Empresarial (Grupo SPI)		
Cantabria	DGIDTEI- D.G. de Innovación, Desarrollo Tecnológico y Emprendimiento Industrial	Jefa de Servicio	Aránzazu de la Pedraja Murgoitio
Asturias	IDEPA- Agencia de Desarrollo Económico del Principado de Asturias	Presidente y Consejero de Industria, Empleo y Promoción Económica	Enrique Fernández Rodríguez
		Directora General	Eva Pando Iglesias
Galicia		Directora de Agencia	Patricia Argerey Vilar

	GAIN- Agencia Gallega de Innovación	Dirección Área de Programas de Innovación	Sabela Pardo Rodríguez
Murcia	D. G. de Investigación e Innovación Científica	Directora General	María Isabel Fortea Gorbe
Aragón	Instituto Aragonés de Ciencias de la Salud	Directora de la Cátedra IACS de CPI en Salud	Carmen de Guerrero
Castilla la Mancha			
Islas Canarias	Consejería de Economía, Conocimiento y Empleo	Consejera	Elena Máñez Rodríguez
Extremadura	Oficina para la Innovación		
Islas Baleares	Consejería de Salud y Consumo		

Table 1.

Table 2 shows the list of the public procurers with which CSIC contacted and their interest in the project and Living Lab of PPI.

Entity	Interested?	MOU signed	Participation on LLab
DG GROW	YES	NO	NO
Ministerio de Ciencia, Innovación y Universidades	YES	NO	NO
Agencia Andaluza del Conocimiento	YES	YES	YES
Consejería de Ciencia, Innovación y Universidad - Principado Asturias	YES	YES	YES
Grupo Tragsa	YES	YES	YES
Plataforma Oceánica de Canarias (PLOCAN)	YES	YES	YES

Unidad de Investigación del Departamento de Energía (CIEMAT)	YES	YES	YES
Gobierno de Navarra	YES	YES	YES
Guardia Civil	YES	YES	YES
SASEMAR	YES	YES	YES
SERGAS/ACIS	YES	YES	YES
Red Española de Ciudades Inteligentes (RECI)	YES	YES	NO
Red Innpulso	YES	YES	NO
GAIN	YES	NO	NO
Instituto para la Competitividad Empresarial de Castilla y León (ICE)	YES	NO	NO

FICYT	YES	NO	NO
Ayuntamiento de Las Rozas	YES	NO	NO
Agencia Valenciana de Innovación (AVI)	YES	NO	NO
Ministerio de Ciencia e Innovación	YES	NO	NO
Ministerio Sanidad	YES	NO	NO
Ministerio Transición Ecológica: Energias Renovales	YES	NO	NO
Ministerio Transición Ecológica: Protección del Mar	YES	NO	NO
Ministerio Transición Ecológica: SEGE	YES	NO	NO
Organismo Autónomo Parques Nacionales	YES	NO	NO

Puertos del Estado	YES	NO	NO
Servicio Andaluz de Salud (SAS)	YES	NO	NO
SEMA	NO	NO	NO
Ayuntamiento Madrid	YES	NO	NO
Canal Isabel II	YES	NO	NO
ENRESA	YES	NO	NO
IDAE	YES	NO	NO
MAPA/SEIASA	YES	NO	NO
SPRI	NO	NO	NO
CDTI	YES	NO	NO
INCIBE	YES	NO	NO
DECCO Ibérica	NO	NO	NO

IMESAPI	NO	NO	NO

Table 2.