

REPORT OF JUSTIFICATION OF THE NEED OF THE PURCHASING OF THE TECHNICAL ASSISTANCE AND PROJECT MANAGEMENT SERVICES FOR THE COORDINATION AND OPERATION OF THE PIXEUROPE PILOT LINE AT ICFO, FINANCED BY THE EUROPEAN UNION'S HORIZON EUROPE AND THE RECOVERY, TRANSFORMATION AND RESILIENCE PLAN (PRTR)

1. Purpose of the Contract

1.1 The contract object is the Technical Assistance and Project Management Services for the Coordination and Operation of the PIXEurope Pilot Line at ICFO.

The contract object includes:

- Related with the **HE-GAs**:
 - o Support of administrative management, and quality assurance of the project execution (Project management, Quality assurance and Risk management).
 - o Expert services related to dissemination, communication, and networking activities, events organization and Pilot Line promotion, including website, promotional materials and social media (Dissemination, Communication and Networking activities).
- Related with the **DEP-GAs**:
 - o Open Access and Gateway of the Pilot Line requires management of a much larger operation involving also other Research and Technology Organization (RTOs). ICFO will thus seek for a subcontractor with such experience to assist their staff, especially in the management flows of the single-entry point.

1.2. Lots division: The object of the contract is not divided into lots because the service contracted is for the integral technical assistance in the development of the project, and the division of the purpose of the contract into different companies could generate technical troubles in order to coordinate all parts of the assistance and in order to divide responsibilities.

1.3 The expression of the coding corresponding to the Common Procurement Vocabulary (CPV) nomenclature is as follows: 72224000-1 Services of consultancy in projects development.

2. Justification of the need of the purchasing and insufficiency of means

The European Commission has selected this programme as its 5th pilot line and has chosen the proposal led by ICFO, the Institute of Photonic Sciences (based in Barcelona), to coordinate it at continental level. The pilot line consortium also involves participating entities from Austria, Belgium, Finland, France, Ireland, Italy, Poland, Portugal, the Netherlands and the United Kingdom. The pilot line is co-

financed by the Ministry for Digital Transformation and the Civil Service of the Government of Spain and supported by the Generalitat of Catalonia.

Over the next 10 years and during the operational phase, the pilot line will boost the production capacity and innovation potential of European companies to a new level, allowing them to develop and manufacture prototypes of their products based on photonic chips. It will support research organizations in bridging the gap between the laboratory and the factory exploiting novel scientific results and accelerating the commercialization of this research, in particular by supporting the creation of new start-ups.

In particular, the pilot line will contribute to the design and development of an optimized manufacturing chain, involving end-users and industry partners for the evaluation of production processes to be transferred to industrial scale, with the ultimate aim of creating a unique European PICs ecosystem, with open access services to the user, establishing itself as the first fully integrated open access PICs pilot line in the world.

The Pilot Line includes three parallel and synergistic projects, all leading to the creation of PIXEurope Infrastructure: (i) The Joint Procurement (JP) that is purchasing, installation, acceptance of new equipment; (ii) The Setting up and development under the Horizon Europe (HE) program; (iii) The Operation and Open Access under the Digital Europe Programme (DEP) programme. Each of these three projects have their own agreements, the JP Agreements (JPAs); The HE and DEP Grant Agreements (HE-GA and DEP-GA).

To develop the Pilot Line, ICFO requires to purchase the Technical Assistance and Project Management Services for the Coordination and Operation of the PIXEurope Pilot Line at ICFO.

3. Economic regime of the contract

3.1 Tender budget.

The base bid budget is €600,000.00, excluding VAT (€120.000/year), and €726.000, including VAT, a figure that includes all the task described on the document of technical specifications.

The base budget for the tender corresponds to the amount identified in the Grant Agreement as the economic portion of the project that would be subcontracted to third parties.

The base bid budget is divided into project in the following terms:

- HE-Gas: €500.000, excluding VAT.
- DEP-Gas: €100.000, excluding VAT.

3.2 Estimated value.

In accordance with the provisions of article 101 of Law 9/2017, of November 8, on Public Sector Contracts (LCSP), the estimated value of the contract is €720,000.00, excluding VAT, according to the next concepts:

- Tender budget: €600.000, VAT excluded.
- €120.000 for possible causes of modifications of the contract (20% of the tender budget).

3.3 Contract price.

The price in this contract is determined based on a fixed price for the development of the set of services set out in the technical specifications.

The establishment of prices in this contract is carried out based on current market prices for the acquisition of these services.

3.4 Source of funding.

This contract has received funding from the European Union's Horizon Europe under the Grant Agreement # 101213727, Chips Joint Undertaking (Chips JU) and the Spanish Ministry for Digital Transformation and Civil Service, and is supported by funds from the Recovery, Transformation and Resilience Plan (PRTR).

4. Existence of credit

There is sufficient credit in the budget for the 2025 financial year to meet the obligations arising from the contract. For subsequent financial years, contracting is conditioned on the existence of sufficient credit in the annual budgets.

5. Billing system

The contractor may invoice monthly the amount resulting from the division between the award price and the total number of months of the contract. If finally, the contract ends before de 5 years scheduled, at the end of the contract the contractor will have the right of billing all the pendant amount.

6. Duration

6.1 Duration of the contract

The duration of the contract is 5 years from the date of signing the contract.

During the execution of the contract, the contractor is obligated to comply with the time limits established in the technical specifications document.

The service guarantee period will be two months from the receipt of the contract.

6.2. Extensions

The possibility of extending the contract is not contemplated.

7. Award procedure

It is proposed that the file be processed through a simplified open procedure, not subject to harmonized regulation.

8. Technical solvency and economic solvency requirements

8.1- Economic solvency requirements

The economic solvency will be proven by the following requirement:

Billing volume: referred to the best year within the last three available, the billing volume of the bidders must be equal to or greater than 1 time the average annual estimated value of the contract (estimated value / maximum number of years of the contract).

The annual volume will be proven by presenting the latest annual accounts approved and deposited with the Commercial Registry or entity with which they must be registered. In the case of individual entrepreneurs, not registered in the Commercial Registry, the proof will be made by means of the inventory books and annual accounts legalized by the Commercial Registry.

8.2- Technical solvency requirements

Technical solvency will be accredited by the following requirements:

8.2.1 – Company experience in similar works

Bidders must demonstrate recent and verifiable experience in the technical and operational management of complex European research and innovation projects involving multiple international partners. Specifically, they must have led or played a key coordination role in at least three multi-partner R&D&E projects funded under Horizon 2020, Horizon Europe, or the Digital Europe Programme within the past seven years.

The bidders must also have experience supporting distributed research infrastructures with multiple operational sites and open access to third-party users. This includes knowledge of workflow interoperability, service integration, and stakeholder engagement models.

Expertise in photonics is required, preferably related to Photonic Integrated Circuits (PICs), with demonstrated capacity to support innovation strategies in the field.

The bidder shall also have experience in data governance and in the deployment or use of digital platforms that support coordination, user access, and reporting in multi-partner infrastructures, in compliance with EU data protection regulations.

8.2.2 – Core team

To be admitted to the procedure, bidders must propose a core team of at least three professionals who collectively provide a full time and continuous service and bring the following competencies:

- Coordination and management of multi-partner R&D&E projects
- Financial or data management in engineering or pilot line environments
- Technical background in photonics or semiconductors
- Operational experience with software tools for infrastructure and user management

The contractor must ensure team continuity during the duration of the project. CVs and roles of the proposed professionals shall be included in the technical offer and will form part of the evaluation process.

9. Evaluation criteria

9.1 Criteria evaluated using automatic formulas: up to 75 points.

The total score of 75 points is distributed between the financial offer (35 points) and technical criteria evaluated automatically (40 points).

The award criteria evaluated by means of automatic formulas are as follows:

1.- Financial offer: up to 35 punts.

Bidders must offer a price for the set of works and tasks described in the technical specifications. The proposal with the lowest price will obtain the maximum score, and the rest of the offers will be scored according to the following formula:

$$P_v = \left[1 - \left(\frac{O_v - O_m}{IL} \right) \times \left(\frac{1}{VP} \right) \right] \times P$$

P_v: score of the offer to be evaluated

P: points economic criteria (35)

O_m: best offer

O_v: offer to be evaluated

IL: tender import

VP: weighting value = 1.75

The formula is in accordance with the provisions of Directive 1/2020 of the Directorate General of Public Procurement on the application of formulas for the evaluation and scoring of economic and technical proposals. The financial score will be rounded to the second decimal place.

The total price offered may not exceed the maximum tender budget. Offers that do not meet this requirement will not be accepted.

2.- Company experience in similar works above the minimum: up to 40 points.

In terms of technical solvency, the following experience is set as the minimum mandatory to be fulfilled by the company and by the personnel it proposes to assign to the execution of the contract:

- Bidders must demonstrate recent and verifiable experience in the technical and operational management of complex European research and innovation projects involving multiple international partners. Specifically, they must have led or played a key coordination role in at least three multi-partner R&D&E

projects funded under Horizon 2020, Horizon Europe, or the Digital Europe Programme within the past seven years.

- The bidders must also have experience supporting distributed research infrastructures with multiple operational sites and open access to third-party users. This includes knowledge of workflow interoperability, service integration, and stakeholder engagement models.
- Expertise in photonics is required, preferably related to Photonic Integrated Circuits (PICs), with demonstrated capacity to support innovation strategies in the field.
- The bidder shall also have experience in data governance and in the deployment or use of digital platforms that support coordination, user access, and reporting in multi-partner infrastructures, in compliance with EU data protection regulations.

On the evaluation criterion related to the greatest number of experiences, it will be assessed that in each of the areas of experience the bidder has more than one experience, in the following terms:

- Led or played a key coordination role in at least three multi-partner R&D&E projects funded under Horizon 2020, Horizon Europe, or the Digital Europe Programme within the past seven years: up to 10 points.
- Experience supporting distributed research infrastructures with multiple operational sites and open access to third-party users (this includes knowledge of workflow interoperability, service integration, and stakeholder engagement models): up to 10 points.
- Expertise in photonics related to Photonic Integrated Circuits (PICs), with demonstrated capacity to support innovation strategies in the field: up to 10 points.
- Experience in data governance and in the deployment or use of digital platforms that support coordination, user access, and reporting in multi-partner infrastructures, in compliance with EU data protection regulations: up to 10 points.

The one who presents the greatest number of experiences will be awarded the maximum score, and the rest of the proposals will be assessed proportionally.

Bidders must provide accreditation of the declared experiences through certificates of good execution issued by clients.

9.2 Criteria subject to value judgment: up to 25 points.

1.- Technical project report: subjective evaluation (25 points.)

The coherence and adequacy to the project and the services to be provided of the technical proposal offered by the bidder will be evaluated. It is mandatory to develop and implement each and every one of the functionalities and technical requirements identified and described in the technical specifications, as all are necessary for the development of the technical assistance and project management services. It is necessary to develop what is described and identified as the scope of the project in the Technical Specifications.

This criterion is broken down into the following sub-criteria:

- Methodology proposed for the development of the tasks set out in the technical specifications - 10 points
- Methodology proposed for the relationship with ICFO and for the relationship with the rest of the project members – 7,5 points
- Identification of risks or critical points of the service, and measures proposed to resolve these risk situations – 7,5 points

The methodology presented by the bidder for the provision of services in each of the specific areas detailed for each sub-criterion will be evaluated, taking into account the systematic approach to be used to carry out the provision with the particular specifications that guarantee its correct execution and interrelation with ICFO.

Based on the information contained in the Technical Specifications, the bidder must submit a proposal describing the working methodology to be used in the provision of services. The methodology presented by the bidder that improves, develops, and/or complements the tasks listed in the Technical Specifications will be evaluated. Conversely, the lack of coherence with the tasks listed in the Technical Specifications will be evaluated negatively.

Likewise, in this section, the tools and architectures that, based on the specifications defined in the Technical Specifications, the bidder proposes will be evaluated; additionally, the identification of the key aspects of the service and the measures proposed to ensure an adequate solution/treatment in the event of being awarded the contract will be valued. Aspects that are generally applicable to the service and therefore not relevant will not be evaluated.

10. Guarantees

The proposed successful bidder must provide a final guarantee amounting to 5% of the award price, excluding VAT.

11. Contractual penalties

The contractor will have to recover from the contracting entity the damages and indemnify for the losses derived from negligence or carelessness in the fulfillment of the obligations resulting from the contract.

Likewise, they will be responsible for any damages and losses caused to third parties during the execution of the contract. In the event of non-compliance or defective completion of the obligations assumed by the awardee, the contracting entity may terminate the contract or compel it to complete the contract.

Failure to comply with contractual obligations will result in the imposition of penalties provided for in article 193 of the LCSP. Delay in the terms of the commitments due to causes attributable to the awarding company, except for causes of force majeure that are formally communicated by the company itself, will result in the following economic penalty:

- One per cent (1%) of the total amount of the contract for each week of delay in the delivery of deliverables, when it is proven that the delay is attributable to the contractor, with a maximum of 30 per cent (30%). At this point, ICFO, if it deems appropriate, may initiate a process that culminates in the termination of the contract in force.

In the event of defective performance of the service subject to the contract or non-compliance with the commitments assumed by the contractor(s) or the special execution conditions, the following penalties may be imposed:

- In the event of non-compliance with the special execution conditions defined in the specifications, a penalty corresponding to 5% of the contract price, excluding VAT, may be imposed.
- In the event of non-compliance with environmental, social, or labor obligations referred to in clause twenty-nine of these specifications, a penalty corresponding to 10% of the contract price, excluding VAT, may be imposed, and the total of these may not exceed 50% of the contract price, depending on their severity, which will be assessed by the contracting authority in each case.
- In the event of non-compliance by the contractor with the obligation to submit the detailed list of subcontractors or suppliers and proof of compliance with payments, as provided for in clause thirty-five of these specifications, a penalty corresponding to 5% of the contract price, excluding VAT, may be imposed.

12. Responsible for the contract

It is proposed for the task of responsible for the service by the ICFO Mr. Valerio Pruneri, ICREA Professor, ICFO Group Leader and Director of the pilot line.

13. Reasons for contract modification

The contract may be modified up to 20% of its initial price for the following reasons:

- An increase in the number of professionals required to execute the contract.
- An increase in the intensity and dedication to cover service needs compared to those initially established.
- A regulatory or technical change that justifies the need to adjust the service to the new reality.

14. Subcontractors

The contractor may arrange with third parties the partial performance of the service covered by the contract, if are fulfilled the provisions established in the administrative clauses and those established in article 215 of the LCSP are complied with.

15. Data protection and confidentiality clauses

The contractor is expressly obliged to comply with current regulations on the protection of personal data, maintaining absolute confidentiality and reserve on any data that may be known during the performance of the contract, especially those of a personal nature, which may not be copied or used for purposes other than those stated in these specifications, nor transferred to third parties. The data in question must be deleted once the contractual relationship referred to in these specifications is terminated.

Castelldefels, on the date of signature.

Mercè Carrasco

Chief Financial Officer of ICFO