

PLEC DE PRESCRIPCIONS TÈCNIQUES

**ACORD MARC PER A L'HOMOLOGACIÓ DE PROVEÏDORS PEL
SUBMINISTRAMENT DE SINGLE PHOTON COUNTING AVALANCHE
PHOTODIODES FOR DIFUSE OPTICS (SPADS) MITJANÇANT
PROCEDIMENT OBERT SUBJECTE A REGULACIÓ HARMONITZADA**

NÚMERO D'EXPEDIENT: ICFO-2026-030

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CLAUSE 1. Object of the contract

The purpose of this Technical Specifications document is to establish a uniform framework for evaluating the various bids submitted for the supply of the products described herein, which are the subject of this procurement process.

All specifications detailed in the technical specifications and requirements are not exhaustive or limiting. Therefore, any other element that the bidding company deems appropriate must be included and specified in the submitted bid.

ICFO, as a scientific research center, requires this framework agreement, which will serve as an efficient tool for acquiring the products described. The item type linked to the CPV (Common Procurement Vocabulary) list is as follows: 38636000-2; Specialized optical instruments.

The scope of this framework agreement includes all items encompassed by the aforementioned CPV code, as well as its subsequent subcategories.

CLAUSE 2. Needs to satisfy

In order to build and use “diffuse correlation spectroscopy” prototypes that are used by ICFO Medical Optics for biomedical and clinical research, it is critical to have high quantum efficiency, fast and very specialized single photon counting avalanche photo diodes. These detectors enable efficient characterization of the laser speckle statistics which, in turn, allow the measurement of blood flow in deep tissues under low light conditions.

CLAUSE 3. Technical requirements

Material: The supplying of single photon counting avalanche photodiodes (SPAD) suitable for diffuse optical monitors. We are seeking to purchase up to 25 SPADs per year for three years (estimate) with the following specifications.

Key Specifications:

- Dark current should be less than 600 counts/second.
- Quantum or photon detection efficiency at 830nm should be at least 30%
- Single photon timing resolution should be less than 600 ps FWHM.
- Dead time should be less than 70ns.
- Output pulse width should be less than 40ns.
- Afterpulsing probability should be less than 1%.
- Should be FC/PC connectorized for single mode fiber coupling.
- Should be ROHS compliant.
- Should provide TTL output.
- Should be able to power and mount four units in a space less than 20cm (W) x 4cm (H) x 20cm (D).
- CE MARKING

CLAUSE 4. Transportation

The proposal will include transportation to ICFO's facilities including insurance and all export/import and customs duties. **DAP incoterm will apply.**

CLAUSE 5. Warranty

Minimum 1 year warranty, from the date of the acceptance of each delivery.

CLAUSE 6. Delivery and Installation Time

Delivery terms: between 8-16 weeks. Delivery and installation based on requests after the date from the PO issued by ICFO.

Place of delivery: ICFO, Turgut Durduran Laboratory

CLAUSE 7. Contract budget, estimated value and estimated procurement volume

The overall expenditure arising from the framework agreement cannot be specified in advance, as it will be configured by the actual expenditure accumulated for the acquisition of the goods subject to this contract and during its period of validity.

The contracts will be processed by the ICFO through the corresponding expenditure files and financed by charging to the budget credit thereof, so the figures indicated are in no way binding, but rather indicative.

Therefore, a maximum tender budget is not established in this procedure since the material to be delivered by the awarded company (or companies, as the case may be) will be subject to the needs that the ICFO has during the validity of the contract.

Notwithstanding the above, and to facilitate the bidding companies to make an appropriate calculation of their offers based on the expenditure of the previous financial years and the expected future projection, a procurement volume of 973.500 Euros is estimated for the entire duration of the contract (approximately annual procurement of 324.500 Euros, excluding VAT).

The estimated value of the contract, therefore, is 973.500 Euros (excluding VAT).

As indicated in the PCAP, the ICFO is not obliged to exhaust the entire amount, as the amounts of the contracts based on this framework agreement respond to unforeseeable needs and for this reason, these contracts could amount to a lower amount than initially planned.

CLAUSE 8. Award of Contracts Based on the Framework Agreement

In accordance with the provisions of the PCAP, this framework agreement will approve suppliers that meet the specified technical requirements. Therefore, contracts arising from this framework agreement may be awarded to any of the approved companies.

Bidding companies must have the distribution rights for the materials in the indicated territory.

In Castelldefels, on the date of the digital signature.

Dr. Turgut Durduran
Medical Optics Group Leader