







National Quantum Science and Technology Institute Missione 4, Componente 2, Investimento 1.3 – Spoke 5 Codice progetto MUR PE00000023 – CUP UNINA E63C22002190007



Università degli Studi di Napoli Federico II

OPEN PROCEDURE WITH APPLICATION OF THE CRITERION OF THE MOST ECONOMICALLY ADVANTAGEOUS OFFER IDENTIFIED ON THE BASIS OF THE BEST QUALITY/PRICE RATIO, PURSUANT TO ARTICLES 71 AND 108 OF LEGISLATIVE DECREE NO. 36/2023 AND SUCH AMENDMENTS, IN ONE LOT HAVING AS ITS OBJECT THE SUPPLY OF MICROWAVE MEASUREMENT ELECTRONICS FOR THE CHARACTERIZATION OF SUPERCONDUCTING QUANTUM DEVICES FOR THE NQSTI PROJECT IN THE UNIVERSITY CAMPUS OF MONTE SANT'ANGELO, NAPLES.

TECHNICAL ADMINISTRATIVE SPECIFICATIONS

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ART. 1

OBJECT OF THE CONTRACT AND PLACE OF DELIVERY

Tender in two lots for the awarding of a Contract for the Supply of microwave measurement electronics for the characterization of superconducting quantum devices for the NQSTI project, according to the following Art. 3. This contract is financed under the PNRR – Mission 4, Component 2, Investment 1.3, MUR Project Code: PE00000023 – CUP: E63C22002190007, short name of the project "NQSTI". The supply includes: installation of the systems, transport, loading, unloading, porterage services and anything else necessary to allow the supply to be carried out in a workmanlike manner in the destination environments.

The equipment covered by this Specification must be delivered, installed and verified for correct execution at the headquarters of the Department of Physics – University Complex of Monte Sant'Angelo Building 6 Via Cintia – 80126 - Naples.

The contract is divided into two separate lots, having as their object:

• LOT N. 1: supply, installation and testing of microwave measurement electronics for the control and readout of at least twenty (20) superconducting qubits;

The scientific instrumentation, the subject of this specification, must be supplied complete with everything necessary for its operation. The supply, for each lot, must include, where necessary, all the latest generation hardware and software components available on the market for instruments of the same class, in order to offer performances capable of satisfying the needs of the NQSTI project. The supply must also be equipped with all the necessary accessories, even if not detectable by this Specification, to provide the same finished and perfectly functioning supply. All materials, devices and equipment supplied must be of the best quality, worked to perfection and corresponding to the service for which they are intended. The systems must be certified in compliance with current regulations.

Therefore, the supply includes the accessory and related services of delivery, installation to perfection in the destination environments and according to the requirements of this Specification, possibly integrated, where necessary, by the instructions specifically provided by the Sole Project Manager, configuration, testing, training and operational start-up of the equipment, as well as the management under warranty of the same. The contract, for each lot, is a lump sum.

ART. 2 CONTRACT REGULATIONS

This contract is governed by:

- 1) the provisions of this Technical Administrative Specification;
- 2) the Public Contracts Code, issued with Legislative Decree 36/2023 (hereinafter "Code") and subsequent amendments, by Law 120/2020 converting Legislative Decree 76 of 16/07/2016 and by Legislative Decree no. 50/2016, for the parts still in force according to the transitional regime;
- 3) the Guidelines issued by Anac;
- 4) Law 190/2012 and subsequent amendments;
- 5) the rules on the traceability of financial flows pursuant to Law no. 136 of 13 August 2010;
- 6) the provisions of the current University Regulations for Administration, Finance and Accounting;
- 7) by the current Three-Year Plan for the Prevention of Corruption and Transparency of the University;
- 8) by the Presidential Decree of 16 April 2013, no. 62 containing the "National Code of Conduct for Public Employees";
- 9) by the current University Code of Conduct;
- 10) by the provisions contained in the Legality Protocol of the Prefecture of Naples, to which the University adhered on 29.12.2009.
- 11) by the Decree of the Minister of Economy and Finance of 6 August 2021 relating to the allocation of resources in favor of each Administration in charge of the PNRR interventions and corresponding milestones and targets;
- 12) by Article 1, paragraph 1042 of Law 30 December 2020, no. 178 pursuant to which one or more decrees of the Minister of Economy and Finance establish the administrative accounting procedures for the management of the resources referred to in paragraphs 1037 to 1050, as well as the methods of reporting the management of the Fund referred to in paragraph 1037;
- 13) Article 1, paragraph 1043, second period of Law 30 December 2020, no. 178, pursuant to which in order to support the management, monitoring, reporting and control activities of the components of the Next Generation EU, the Ministry of Economy and Finance Department of the

General Accounting Office of the State develops and makes available a specific IT system;

- 14) from the MEF Circular of 29 June 2022, no. 27 which defines the monitoring obligations for PNRR interventions;
- 15) from Article 17 of EU Regulation 2020/852 which defines the environmental objectives, including the principle of do no significant harm (DNSH, "Do no significant harm"), and the EU Commission Communication 2021/C 58/01 containing "Technical guidelines on the application of the principle of "do no significant harm" under the regulation on the Recovery and Resilience Facility";
- 16) from the cross-cutting principles envisaged by the PNRR, such as, among others, the principle of contribution to the climate and digital objective (so-called tagging), the principle of gender equality and the obligation to protect and enhance young people;
- 17) from the obligations to ensure the achievement of targets and milestones and the financial objectives established in the PNRR.

ART. 3

TECHNICAL SPECIFICATIONS OF THE INSTRUMENTATION

The equipment subject to the contract must have the minimum technical characteristics indicated in the Technical Specifications

The following must be supplied with the microwave electronic equipment:

- Paper and computerized manuals.
- System management and data acquisition software including usage licenses for an unlimited period of time.

The successful tenderer for each lot must undertake to provide any updates for no less than 5 years starting from the date of the verification of proper execution with a positive outcome and without additional costs.

For each lot, the supply must include a guarantee, specifying the period and conditions of the guarantee itself.

The material supplied must be brand new and "state of the art" for the current technology, with the possibility of any future implementations and enhancements.

The supply must also be equipped with all the necessary accessories, even if not detectable by

these technical specifications, to provide the same finished and perfectly functioning supply, according to the best and most recent technology.

All materials and equipment supplied must be of the best quality, worked to perfection and corresponding to the service for which they are intended. The supply must be certified in compliance with current regulations.

The supply must be installed not only according to the provisions of this Specification, but also according to good workmanship, meaning with this denomination the observance of all the more or less codified standards for the correct execution of the works.

Without prejudice to the minimum specifications described above, the instrumentation acquired by the successful tenderer will include the improvements and optional features proposed by the successful tenderer in the offer.

ART. 4

SUPPLY PERFORMANCE TIME LIMIT

All equipment supplied for each lot must be delivered, installed and made operational by the economic operator, under the coordination of the Procedure Manager (RUP) and the technical staff of the Quantum Computing Laboratory of the University of Naples Federico II that is the subject of the supply and in such a way as to satisfy all the specifications of this Specification. The contractor must also guarantee the following activities, to be understood as fully remunerated in the price offered at the time of the tender: transport, assembly, positioning on site, disposal of packaging, installation, training, warranty.

Transport will be carried out by the contractor, who must provide for delivery to the floor of the supply in the premises indicated below:

■ LOT NO. 1: Quantum Computing Laboratory QC2; Location: Department of Physics "Ettore Pancini", Building 6 of the Monte Sant'Angelo Campus, 80125 Naples, NUTS code: ITF33.

For each lot, the delivery of the supply and the installation must be carried out within the deadline indicated in the table, starting from the date of signing the contract or from the report of early execution of the supply, unless a more advantageous delivery deadline is offered by the manufacturer in the temporal offer.

Delivery term

The term may be extended for a maximum of 30 days, upon motivated request.

The delivery and installation of the supply include all costs relating to packaging, transport, porterage, delivery "to the floor", installation, removal of packaging and any other activity instrumental to them.

All equipment supplied must be provided with certification marks recognized by all countries of the European Union and must comply with the standards relating to electromagnetic compatibility. The supplier must guarantee the conformity of the equipment to the CEI regulations or other recognized international provisions and, in general, to the current legislative, regulatory and technical standards governing the components and methods of use of the equipment for the purposes of user safety.

The installation will be scheduled, in agreement with the Procedure Manager and the Laboratory Manager.

ART. 5

OBLIGATIONS OF THE CONTRACTOR

In fulfilling the supply, the contractor must use the diligence required by the nature of the service due in accordance with the provisions of the contract and all documents that are an integral and substantial part thereof.

Participation in the procedure and the stipulation of the contract by the contractor are equivalent to a declaration of perfect and complete knowledge and acceptance of all the regulations in force regarding public supply contracts, of the regulations that regulate this contract, as well as of the conditions that pertain to the execution of the supply.

Participation in the procedure and the stipulation of the contract by the contractor are also equivalent to a declaration of the existence of the conditions that allow the immediate execution of the supply.

The contractor is required to perform the supply in accordance with what is proposed in the technical offer, which constitutes a contractual obligation. Failure to comply with what is offered during the tender constitutes a serious breach of contract.

Finally, since this is a contract financed with funds from the PNRR resources, the contractor is required to comply with:

- the principle of "Do No Significant Harm (DNSH)", i.e. "do not cause significant harm" according to which no measure financed by the notices must cause harm to the environmental objectives, in accordance with art. 17 of Regulation (EU) 2020/852. This principle is intended to prove that the planned investments and reforms do not hinder the mitigation of climate change;
- the additional cross-cutting principles provided for in the PNRR, such as, among other things, the principle of contribution to the climate and digital objective (so-called tagging), the principle of gender equality and the obligation to protect and enhance young people;
- the obligations set out in art. 47 of Legislative Decree no. 77/2021 that are applicable, in relation to their company size, in pursuing the principles of equal opportunities, generational and gender, as well as to promote the inclusion of disabled people in the workplace.

ART.6

PENALTIES

In the event of unjustified delay in the execution of the supply by the supplier, a penalty will be applied commensurate with the days of delay.

The daily penalty is equal to 1 per thousand of the net contractual amount.

The penalties may not, in any case, exceed, in total, 10 percent of said net contractual amount.

The Contractor must pay the amount of the penalty imposed by the Administration within the deadline indicated in the communication of its imposition. In the event of failure to pay the amount due, the Administration will withhold the amount corresponding to the amount of the penalty from the first available invoice, without any formal notice or will proceed to enforce the definitive guarantee for the relative amount, with the obligation of the supplier to proceed with the relative reinstatement within the deadline prescribed by the administration.

Furthermore, pursuant to art. 47, paragraph 3 of Legislative Decree no. 76/2021, converted into Law no. 108/2021, economic operators who employ a number equal to or greater than 15 employees and no more than 50 are required, within 6 months of the conclusion of the contract, to deliver to the contracting authority a gender report on the situation of male and female personnel in each of the professions and in relation to the status of hiring, training, professional promotion, levels, category or qualification changes, other mobility phenomena, the intervention of the Cassa Integrazione Guadagni, dismissals, early retirements and retirements, as well as the remuneration actually paid. The economic operator is also required to send the report to the company trade union representatives and to the regional councilor for equality. Failure to produce the report entails the application of the penalties referred to in art. 47, paragraph 6 of Legislative

Decree no. 76/2021, converted into Law no. 108/2021, to be measured according to the seriousness of the violation and proportional to the amount of the contract, up to a maximum of 20% of the net contractual amount, as well as the impossibility of participating, individually/in association, for 12 months in further procurement procedures relating to investments financed with resources from PNRR funds.

ART. 7

CHECK FOR REGULAR EXECUTION

The verification of the regular execution of the supply will be carried out by the Procedure Manager and other members in charge and is aimed at ascertaining the perfect functionality of the equipment subject to the contract as provided for in this Specification.

ART. 8

EQUIPMENT WARRANTY

The equipment to be supplied must be guaranteed in accordance with the provisions of the law in force. The guarantee provided by the successful tenderer must cover a period of at least 36 (thirty-six) months from the date of positive verification of the regular execution of the supply. This guarantee must include repairs or replacements of parts (with the exception of the so-called "consumable" parts clearly identifiable in the accompanying documentation) necessary for the optimal functioning of the supply. Furthermore, travel expenses and the costs of the technicians' labor at the delivery and installation site must be considered included in the guarantee.

In this regard, the successful tenderer is obliged, for the entire duration of the guarantee, to carry out all necessary assistance and technical maintenance activities for the equipment to be supplied, without any limit on the number of interventions and parts to be replaced.

ART. 9

DEFINITIVE WARRANTY

Before signing the contract, the supplier must provide the definitive guarantee referred to in art. 117 of Legislative Decree 31 March 2023, no. 36, at its choice in the form of a deposit or surety, with the methods indicated in art. 106 of the aforementioned decree, for an amount equal to 10% of the contractual amount. The reductions provided for by art. 106, paragraph 8 of the Code apply. The guarantee is provided for the fulfillment of all the obligations of the contract and for the

compensation of damages arising from any failure to fulfill the obligations themselves, as well as for the reimbursement of the sums paid in excess to the executor with respect to the results of the final liquidation, without prejudice in any case to the compensability of the greater damage towards the contractor.

The guarantee ceases to have effect only on the date of issue of the certificate of verification of conformity and in accordance with the methods provided for by art. 117, paragraph 8 of the Code. In any case, the Contracting Authority has the right to ask the successful tenderer to reinstate the guarantee if it has failed in whole or in part.

The Contracting Authority may enforce the guarantee even in the event of termination of the contract, without prejudice to compensation for any further damage.

In any case, for anything not expressly provided for, the provisions of art. 117 of the Code apply.

ART. 10

RESPONSIBLE FOR THE PROCEDURE

The activities relating to the phases of programming, design, assignment and execution of this contract, as identified by the current regulatory framework, as well as by the ANAC Guidelines no. 3 containing "Appointment, role and tasks of the Sole Responsible for the Procedure for the assignment of contracts and concessions", are carried out by the Procedure Responsible, in the person of Dr. Salvatore Verdoliva, salvatore.verdoliva@unina.it, salvatore.verdoliva@personalepec.unina.it, who will also make use of a support office.

ART. 11

BILLING AND PAYMENTS

In terms of invoicing and payments, the provisions of Ministerial Decree no. 55 of 3 April 2013, which came into force on 6 June 2013, apply, which established the start date of the obligations to use electronic invoicing in economic relations with the Public Administration pursuant to Law 244/2007, art. 1, paragraphs 209 to 214.

Therefore, in light of these provisions, the successful tenderer:

a) must issue an electronic invoice, indicating the Unique Office Identification Code reported in the contract and the CIG, only after receiving notification of the positive testing. In order to speed up the aforementioned assessment, the company may issue a pro forma invoice to be sent to the Sole Procedure Manager; please note that the electronic invoice will be rejected by the University

itself if it was issued by the company in the absence of the prior notification referred to above by the Procedure Manager;

- b) upon receipt of the electronic invoice issued by the company, the competent University structure will carry out the consequent obligations;
- c) the payment term is 30 days, starting from the date of receipt of the invoice by the competent accounting offices.

Payments will be made exclusively by crediting a bank or postal current account, or with other payment instruments suitable for allowing full traceability of the transactions. The contractor in whose name the accounts are held must communicate, at his own expense, the identification details of the latter to the University, in compliance with the provisions of art. 3 of Law no. 136/2010 and subsequent amendments, expressly exempting the Administration from any liability for payments made with the aforementioned method.

The aforementioned payments in favor of the supplier will be made only following the effective availability of the credits by the Financing Body and will therefore be subordinate to the aforementioned credits. Therefore, for the purposes of calculating the time for the accrual of any interest for late payment, due to temporary exhaustion of the financial provision referred to above, the days elapsing between the date of request to the Institution providing the financing and the receipt of the relevant accreditation will not be taken into account.

ART. 11-BIS

PRICE PREVIEW

The provisions of art. 125 of the Code regarding the advance payment of the price in the amount of 30% according to the methods provided therein, within 15 days of the actual start of the works declared by the RUP, shall apply.

The provision of the advance payment is subject to the establishment of a bank or insurance surety guarantee of an amount equal to the advance payment increased by the legal interest rate applied to the period necessary for the recovery of the advance payment itself. The aforementioned guarantee is issued by banking companies authorised pursuant to Legislative Decree no. 385 of 1 September 1993, or insurance companies authorised to cover the risks to which the insurance refers and which meet the solvency requirements set out in the laws governing their respective activities. The guarantee may also be issued by financial intermediaries registered in the register of financial intermediaries referred to in article 106 of Legislative Decree no. 385 of 1 September 1993. 385. The amount of the guarantee is gradually and automatically

reduced during the execution of the service, in relation to the progressive recovery of the advance by the contracting authorities.

ART. 12

TRACEABILITY OF FINANCIAL FLOWS

The contractor is required to fulfill all the obligations set forth in art. 3 of Law no. 136/2010 in order to ensure the traceability of financial movements relating to the contract. In particular, the contractor is required to:

- a) communicate to the Contracting Authority the data relating to the dedicated current account on which the payments of the contract fees will be made;
- b) carry out all transactions relating to the contract using banks or Poste Italiane S.p.A., exclusively with payment instruments permitted by art. 3 of Law no. 136/2010;
- c) use the CIG in the context of relationships with suppliers and service providers employed in the development of the contract performance.

The contractor must include in the contracts with subcontractors a specific clause with which they undertake to fulfill all the obligations set forth in art. 3 of Law no. 136/2010 in order to ensure the traceability of financial movements relating to the subcontract.

ART. 13

SAFETY

Considering that the contract concerns the supply of electronic equipment, with an installation time equal to or less than 5 man/days, in accordance with the guidelines received from the competent Prevention and Safety Department, the preparation of the DUVRI is not necessary. However, the supplier is required to take all necessary precautions to ensure full compliance with the current legislation on safety in the workplace and to evaluate, before the start of the contract, the existence of additional and/or different interference risks not already foreseen, which, if detected, must be brought to the attention of the Administration for the purpose of any subsequent drafting of the DUVRI.

ART. 14

RESOLUTION

Without prejudice to the causes of termination provided for by the current regulatory framework, including art. 122 of Legislative Decree 36/2023, the Administration may proceed with the termination of the contract pursuant to art. 1456 of the Civil Code (express termination clause) in the following cases:

- a) repeated breaches that entail the application of penalties in excess of the percentages referred to in art. 4 of this specification;
- b) violation of the prohibition on transferring the contract;
- c) repeated and serious violation of the obligations provided for in this specification by the supplier;
- d) in the event of failure to use the bank or postal transfer or other suitable instruments to allow full traceability of financial transactions;
- e) cancellation of the award following a judicial order;
- f) violation of the obligations deriving from the National and University Codes of Conduct;
- g) failure to comply with the provisions of the Legality Protocol;
- h) in the event that a definitive provision has been issued which provides, against the contracting company, the application of one or more preventive measures pursuant to the anti-mafia law code and the related preventive measures, or a final conviction has been issued for the crimes pursuant to Article 94 of Legislative Decree 36/2023;
- i) for manifest incapacity, poor performance and serious inefficiencies in the execution of the supply;

Furthermore, the Client may proceed with the termination of the contract (express termination clause) in the following cases:

- failure and/or delay in delivery and installation beyond the terms set out in Article 3 of this contract;
- violation of the provisions on the guarantee on equipment;
- failure to accept the supply upon testing.

In all the aforementioned cases, the University will proceed to collect the entire amount of the definitive guarantee, as a lump sum compensation for damages, without prejudice to the right to proceed against the contractor for all costs consequent and deriving from the contractual termination, including any additional contractual costs possibly incurred by the University and consequent to those deriving from the new contractual relationship.

ART. 15

WITHDRAWAL

Without prejudice to the provisions of Articles 88, paragraph 4-ter and 92, paragraph 4 of Legislative Decree no. 159/2011, the Contracting Authority, pursuant to Article 123 of the Code, may withdraw from the contract at any time, holding the contractor harmless by paying for supplies regularly performed as well as the value of useful materials in stock, in addition to one tenth of the amount of

supplies not performed, calculated in accordance with the provisions of Annex II.14 to the Code.

The exercise of the right of withdrawal is manifested by the Contracting Authority by means of a formal communication to the contractor to be given in writing with a notice of no less than 20 (twenty) days, after which the Contracting Authority takes delivery of the supplies and verifies the regularity of the supplies performed up to that point.

ART. 16 SUBCONTRACTING

Subcontracting is permitted within the limits of art. 119 of Legislative Decree no. 36/2023, to which reference is made. The bidder must indicate in the offer the services and supplies or parts of services and supplies that it intends to subcontract. In the absence of indications regarding subcontracting, subcontracting is prohibited. The activities referred to in art. 119, paragraph 3 of the Code are not considered subcontracted. The same will be permitted subject to written authorization from the RUP, following the competent checks.

ART. 17

PROHIBITION OF ASSIGNMENT OF THE CONTRACT AND ASSIGNMENT OF CREDITS

Without prejudice to the hypothesis of subjective modification pursuant to art. 120, paragraph 1, letter d) of the Code, the assignment of the contract is prohibited.

Pursuant to art. 120, paragraph 12 of the Code, the provisions of Law no. 52/1991 apply to the assignment of credits arising from the contract.

ART. 18

ELECTION OF DOMICILE

The contractor undertakes to communicate its legal domicile to which the University Administration may send, notify, communicate any judicial or extrajudicial act relating to the ongoing contractual relationship, with express exemption of the University Administration from any charge in relation to any failed deliveries not attributable to it.

ART. 19

CONTRACTUAL EXPENSES

All expenses related to and resulting from the signing of the contract shall be borne by the contractor.

ART. 20

RESPONSIBILITY TOWARDS THIRD PARTIES

The contractor is solely responsible for any damages to public or private Administrations or to third parties that may arise in the various stages of completion of the supply, exempting the Contracting Administration and the supervisory personnel from any civil or criminal liability.

ART. 21

DATA PROCESSING

Information pursuant to Article 13 of Regulation (EU) 679/2016 containing rules on the processing of personal data. The data collected with this form are processed for the purposes of the procedure for which they are released and will be used exclusively for this purpose and, in any case, within the institutional activities of the University of Naples Federico II. The interested party has the rights referred to in Articles 15-22 of the EU Regulation.

The data controller is the University, in the persons of the Rector and the General Director, in relation to the specific competences. To contact the data controller, you can send an email to the following address: ateneo@pec.unina.it; or to the Data Protection Officer: rdp@unina.it; PEC rdp@pec.unina.it. The complete information relating to the processing of personal data collected is provided on the University website: http://www.unina.it/ateneo/statuto-e-normativa/privacy.

ART. 22

COMPETENT COURT

For any disputes that may arise either during the execution of the contract or at the end of the contract itself between the Contracting Authority and the contractor, which could not be settled by amicable agreement pursuant to art. 211 of the Code, the Court of Naples, in whose municipality the registered office of the University of Naples Federico II is located, shall have exclusive jurisdiction. The applicable law in the event of any disputes is Italian law.

The Sole Project Manager

Dott. Salvatore Verdoliva